Using Distributed Administration

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Contents

PART 1

Introduction

In This Section

CHAPTER 1

About This Manual

Welcome

This manual is intended to be used to introduce, as well as implement Distributed Administration. Distributed Administration is used in conjunction with The Solution Series. It provides a mechanism for ensuring accurate collection and maintenance of expansive employee data.

This manual has been designed as a reference document. It is also used in classroom training. You will find sufficient detail for self-study, before and after classroom training.

Who should use this manual?

This manual is designed to be used by a number of different users. The following users will find it most useful:

- System administrators
  This type of user is involved in the technical tasks required to support the ongoing usage of The Solution Series. These technical tasks include setting up test and production environments and applying code changes.

- Implementation project leaders
  Because the success of Distributed Administration relies on thorough planning, as well as the careful rollout on the different network nodes, implementation project leaders should pay special attention to Planning for Distributed Administration on your Network.

Prerequisite skills

Users of this manual should possess a variety of technical skills, depending on the roles they will play. At a minimum, all users should have:

- Thorough understanding of the control language for your environment
- Familiarity with jobstreams
- Understanding of system backup and recovery
- Authority to compile and link production programs

Additional documentation and training courses

The following documentation and training courses are available from Cyborg Systems to help you understand Distributed Administration and The Solution Series.

Documentation

Document	Description
Technical Administration	Provides descriptions of and detailed instructions for performing the technical tasks that support The Solution Series from the moment installation is complete, through implementation, and through ongoing production administration.

If you do not have a copy of this document, you can obtain one from Customer Support.

Training Courses

Related Course	Description
Technical Administration	Important concepts and tasks are introduced for the technical user performing the technical tasks that support The Solution Series, as well as the technical user performing payroll operations.

If you wish to attend any of these courses, contact Customer Support or visit our website www.Cyborg.com for details of course dates and availability.

How this manual is organized

This manual has been organized to make it as easy to use as possible. The chapters are grouped accordingly into the following parts:

Part	Chapters	Description
1. Introduction	1–2	Provides an overview of the manual and of Distributed Administration.
2. Setup and Usage	3-5	Discusses related concepts and provides detailed instructions for Distributed Administration procedures.
3. Appendices	A-D	Provides descriptions of all Distributed Administration reports, a program quick reference, and the answers to the questions posed at the beginning of each chapter.

Following are descriptions of the chapters within the parts:

Part 1: Introduction

The chapters in Part 1 describe this manual and provide an overview of Distributed Administration:

Read this chapter		To learn about
1	About This Manual	How the manual is organized Where to find what you are looking for Who should use the manual Where to get help
2	Overview of Using Distributed Administration	Data replication and distribution Components of Distributed Administration Benefits of Distributed Administration Peer-to-peer, hierarchical, and server data distribution topologies

Part 2: Setup and Usage

The chapters in Part 2 describe how to plan for, configure, and maintain Distributed Administration:

Read this chapter		To learn about
3	Planning for Distributed Administration on your Network	Administration tasks Data ownership Naming conventions Security considerations
4	Configuring a Distributed Location (DL)	Distribution rules Dual roles of the DL DL data security
5	Performing Distributed Administration Operations	Distributed Administration batch operations (distribution, reception, application, and recovery) Distributed Administration file maintenance Distributed Administration diagnostic reports

Part 3: Appendices

The appendices in Part 3 contain quick reference information and practice and review answers:

Use this appendix		To learn about
A	Report Quick Reference	Distributed Administration reports and their business uses.
B	Program Quick Reference	Programs introduced in Using Distributed Administration

Use this appendix		To learn about
C	Practice and Review Answers	Answers to the Using Distributed Administration practice exercises
D	Messages and Troubleshooting	This section covers some error messages that may occur and potential solutions

How to use this manual

This manual has been designed as a reference manual as well as a training manual. It has been written to facilitate self-study before and after classroom training.

Table of contents

The manual has been carefully designed for ease of use. All our manuals are written to be task oriented to help you complete your business tasks using our software.

The table of contents lists all the tasks and their respective chapters.

Glossary of Terms

A Glossary of Terms section is provided to explain terms used in the documentation.

Index

An index is provided to help you locate specific information.

This document was designed to reduce your need for an index. You should find the table of contents sufficient.

Introductory chapters

It is important that you read the introductory chapters first. Chapter 1 ensures you get the most out of the information we have provided. Chapter 2 provides a high level overview. Read it to get the big picture before reading the detailed instructional chapters.

Instructional chapters

All chapters, other than the introductory chapters, are instructional chapters. They contain detailed instructions on how to complete the business tasks. Each instructional chapter has the following distinct sections:

Key Concepts

Always read the conceptual information first. This will help you understand why you have to perform certain tasks. It will also help you make decisions about your options and help you understand the importance of performing certain tasks. Exercises to help you apply the concept to a business task are included at the end of most concepts.

Apply the Concept

To be certain that you have understood the key concepts in a chapter, complete the Apply the Concept exercises provided. The answers to these exercises can be found in the appendices.

Detailed Directions

When you are ready to perform a task, review the Detailed Directions, which provide guidance, as well as the specific steps, to complete a task.

Guided Practice

The Guided Practice within the Detailed Directions offers you an opportunity to practice a task with step-by-step instructions. It takes you through the various steps, providing detailed examples so you can gain a comfort level with the task. Guided Practice is easy to locate.

For practice, type 'ABC Solutions'.

Note: To successfully follow the Guided Practice, you must have completed all the previous Guided Practice exercises in the manual. The Guided Practice uses the test data installed with our software. For the Guided Practice exercises to work, this test data must not have been altered.

All users who complete the Guided Practice must either have their own copies of the test data or have the test data restored for them.

Extended Practice

To be certain that you have understood the tasks in a chapter, complete the Extended Practice provided. The Extended Practice gives you the opportunity to complete one or more tasks without step-by-step guidance. The answers to these exercises can be found in the appendices.

Note: To be able to complete the Extended Practice exercises in the manual, you must have completed all the previous exercises. You must also be using the test data delivered with the software. This test data must not have been altered.

Review of Questions Answered

To be certain that you have understood all of the information in a chapter, complete the review questions provided at the end of a chapter. The answers to these questions can be found in the appendices.

Conventions used in this manual

The underlying page layout and design of this manual are meant to be as intuitive as possible for you. Our intent is to make it easy to navigate through the manual and concentrate on learning and doing.

Cross-references

Wherever appropriate, we provide cross-references to help you find additional information or further discussion of a specific topic.

☞ *Refer to a cross-reference to find more detail or more discussion on a given topic.*

Notes

Whenever there is important information you should be aware of, we provide a note.

Note: You will find tips or quick techniques covered in notes.

How to get additional help

If you can not find the answers to your questions in this manual, contact Customer Support, who will be able to answer specific questions and give you general advice on training.

Please visit our web site ***www.Cyborg.com*** (see "Cyborg Home - http://www.Cyborg.com") for the latest schedule of available courses and course descriptions.

Suggestions and feedback

We value your feedback on our performance support materials. Please forward any comments on this manual to Customer Support.

CHAPTER 2

Overview of Using Distributed Administration

In This Chapter

Introduction

This section provides descriptions of Distributed Administration and its relevant components, but does not tell you how to accomplish related tasks. Because it introduces many important concepts, you should review this section before continuing on to the procedural sections. The procedural sections related to Distributed Administration are as follows:

- ***Planning for Distributed Administration on your Network*** (on page 25)
  This section addresses the most important phase of any system implementation—planning. Issues such as administration tasks, node naming conventions, and planning for future growth are addressed here.

- ***Configuring a Distributed Location (DL*** (see "Configuring a Distributed Location" on page 39))
  This section walks you through the initial setup and general maintenance of the Distributed Location (DL) on your network.

- ***Performing Distributed Administration Operations*** (on page 55)
  This section offers a detailed description of Distributed Administration operations such as obtaining authorized updates, applying updates locally, and using diagnostic reports to troubleshoot problems.

Prerequisites

- At the minimum, The Solution Series must be installed on all Distributed Locations (DL).
- Use your preferred communications software to transfer updates between Distributed Locations.
- Ensure that your software can support the transfer of variable length records and can handle ASCII to EBCDIC conversion if necessary.

Note: Distributed Administration functions on both relational and non-relational platforms.

Questions answered

The following questions are answered in this section:

1. What are the major functions or tasks performed by Distributed Administration?
2. What kinds of topologies are supported by Distributed Administration?
3. Which Cyborg-delivered programs are used to implement Distributed Administration?
4. What is the difference between replication and distribution?
5. What kinds of The Solution Series data can be shared via Distributed Administration?

The purpose of Distributed Administration

The ability to manage employee-related information and comply with more complex and demanding governmental personnel and payroll regulations has become a great challenge for organizations. Controlling information and minimizing exposure to regulatory compliance issues requires that an expansive volume of employee data be accurately collected, maintained, analyzed, audited, reported, and made available for use in a timely, cost-effective manner.

Cyborg Systems' Distributed Administration answers an organization's enterprise-wide information sharing needs.

Benefits of Distributed Administration

Distributed Administration can address your data handling and sharing challenges by providing the following benefits:

- Consolidation
  You can consolidate processing centers, bringing outsourced payroll processing back inhouse without incurring additional staffing costs.
- Staffing-level reviews
  You can review staffing levels at any/all locations.
- Corporate and division access
  You can immediately access Corporate- and Division-level information rather than rely on manual compilation of business unit information.
- Real-time Payroll expenditures
  You can access current payroll expenditures, rather than wait until monthly reports are run.
- Easy monitoring of regulated areas
  You can easily access your complete, current information to monitor regulated areas.

Distributed Administration—what it does

Distributed Administration provides a means of capturing data created and revised at remote locations and sharing those changes dynamically with other sites. This allows multiple sites to simultaneously run The Solution Series while dynamically updating remote data and receiving updates to their local data.

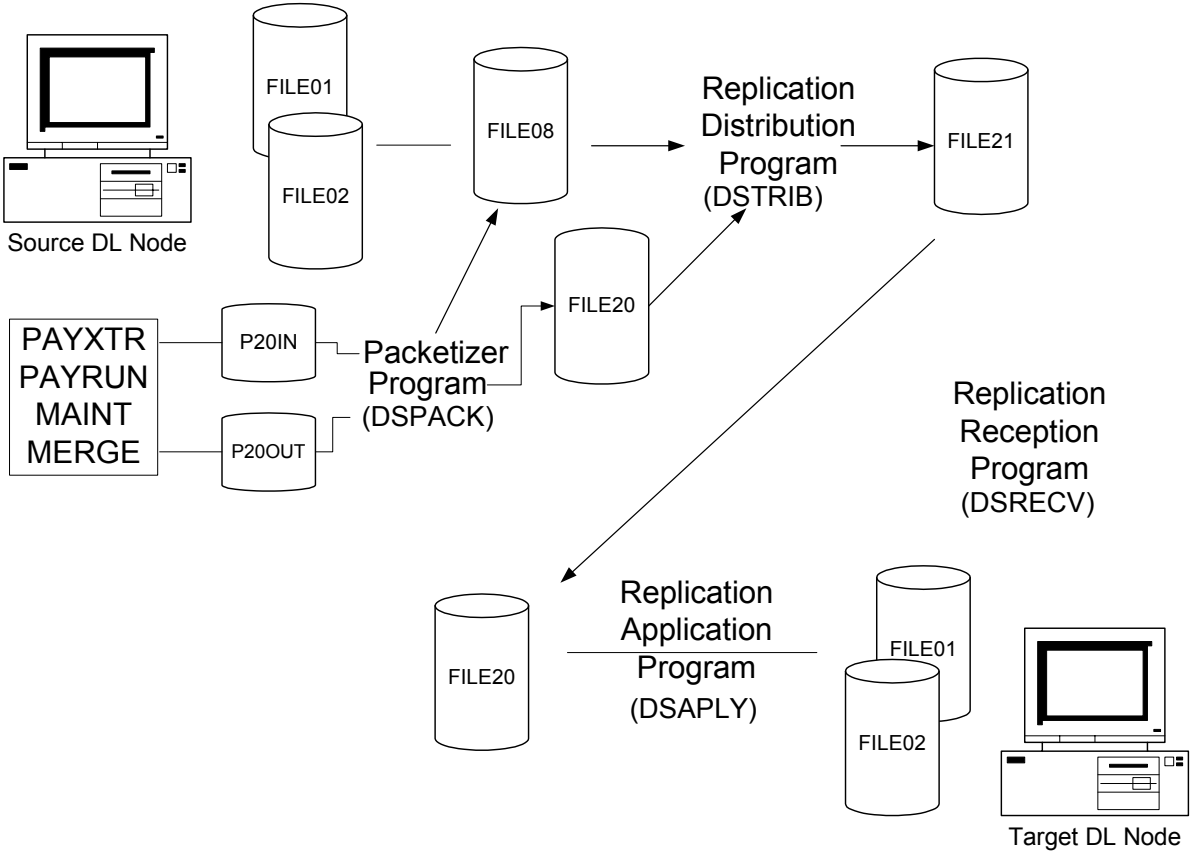
Unlike other distribution processes, Distributed Administration does not require master/slave relationships. This process supports peer-to-peer, hierarchical, and specialized server topologies where bi-directional replication is based on customer-defined data sharing decisions.

Distributed Administration employs a 'store and forward' data sharing technique, where human resources and payroll changes are collected real-time and placed in a holding file. Data can be filtered from the holding file and distributed on a daily or more frequent basis.

What occurs when Distributed Administration is active

When configured to use Distributed Administration files, the source DL automatically logs all local data additions, revisions, and deletions into its Data Replication File (FILE08). This process is performed automatically by The Solution Series core programs.

Only those data changes a target node is allowed to share (per the source DL's configured distribution rules) are distributed from the source node's Replication Holding File (FILE08) to the Replication Packet File (FILE21) when the Replication Reception Program (DSTRIB) is invoked. This only occurs if the node is set up to share its data updates, and then only when the Replication Reception Program is run.



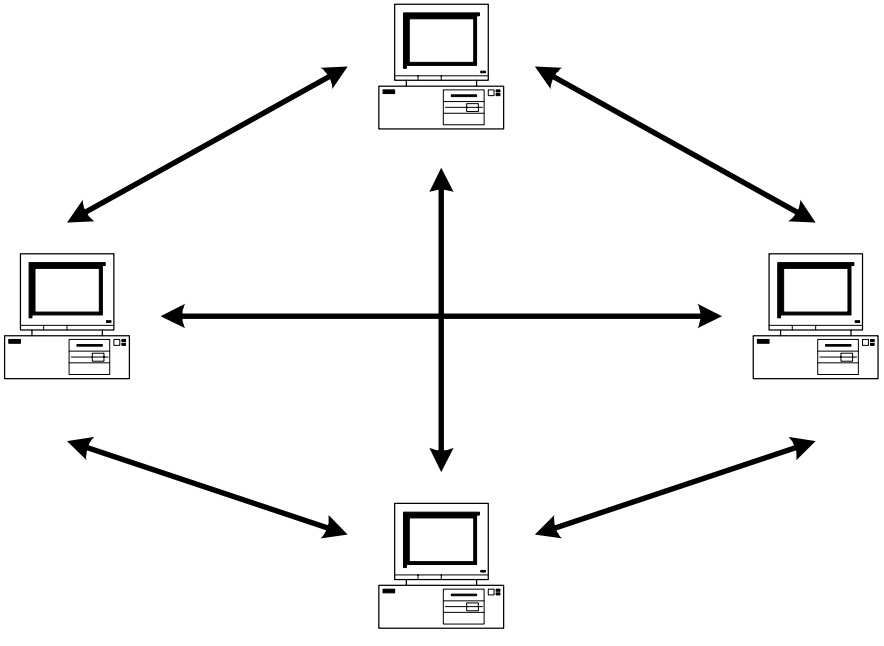
Each target (remote) DL must invoke the Replication Reception Program (DSRECV) to obtain data left for it in a source DL's Replication Packet File (FILE21), then run the Replication Application Program to convert the data appropriately and apply the updates (FILE20) to its local System Control Repository (FILE01) and Employee Database (FILE02).

Topologies

There are several topologies that are supported by Distributed Administration. The most common scenarios are the peer-to-peer, hierarchical, and specialized server topologies. Consider the following examples when designing the optimum data distribution on your network.

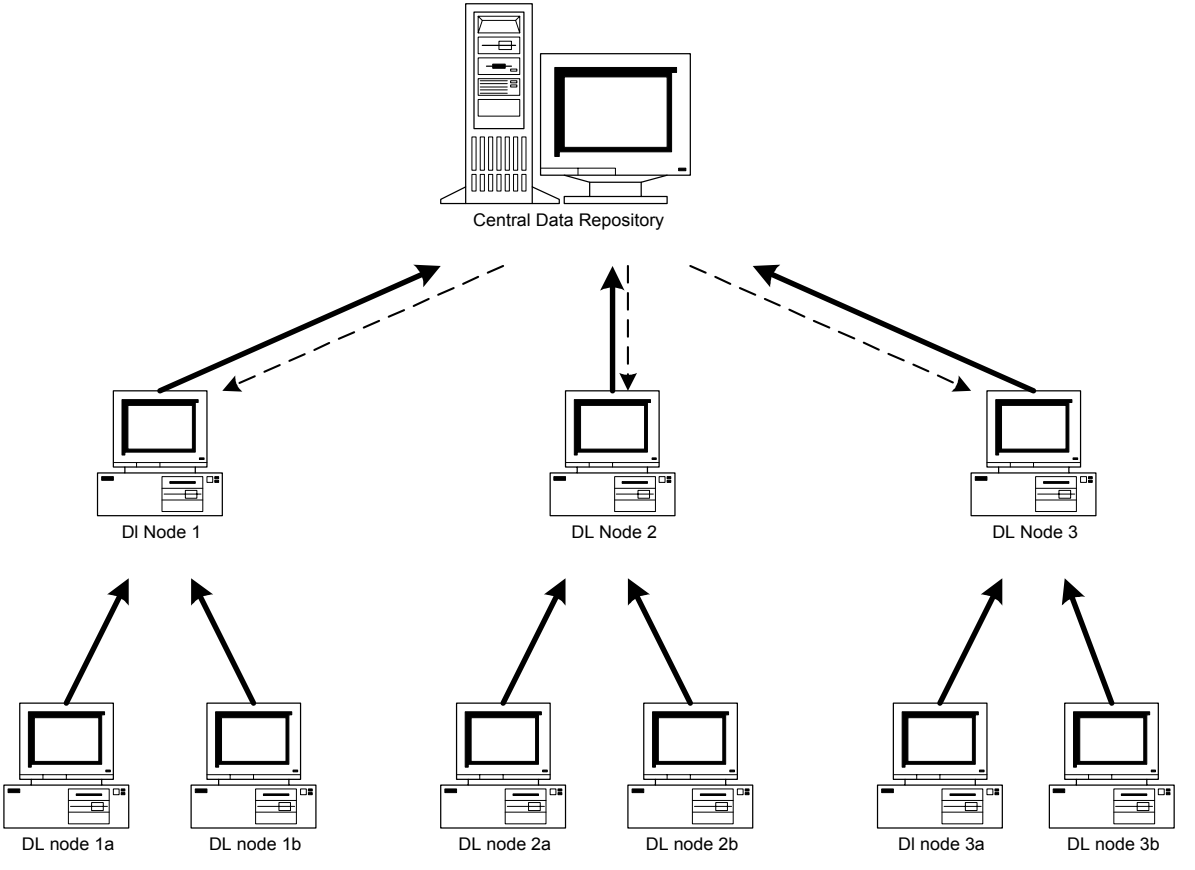
Peer-to-peer data distribution

In a peer-to-peer topology, all customers are independent business units, sharing all data, but performing all their own specialized processing. In terms of Distributed Administration configuration, each customer would be a node with open distribution rules for all other Distributed Locations (DLs). Using this type of design, total data redundancy and independent data processing (such as payroll or tax processing) are possible.



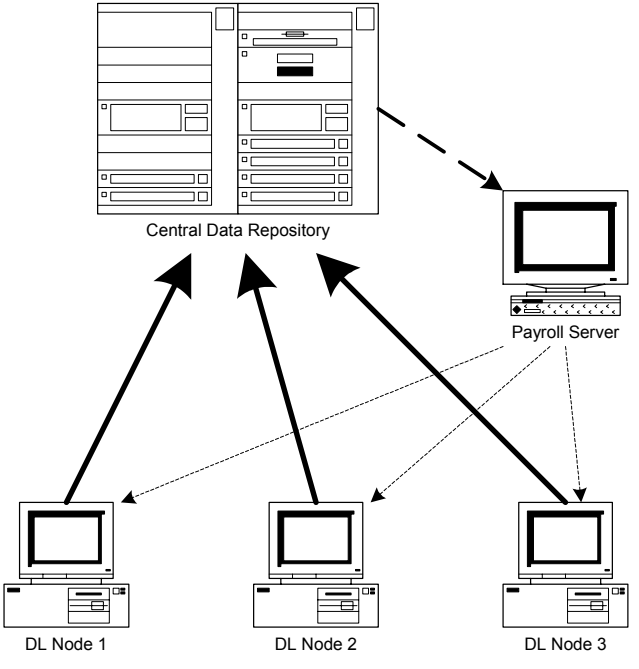
Hierarchical data distribution

In a simple hierarchical topology, customers (DLs) feed all information to the central data repository, which performs all specialized processing. In terms of Distributed Administration configuration, each customer recognizes only one target DL (the level above it) and shares all information with that node. The central repository recognizes all customers as target DLs, but is configured to share only specific data with each customer. All data processing is performed at the central data repository site.



Data distribution with specialized servers

Specialized server topologies are hierarchical, except the central data repository uses a specialized server for special processing and information distribution. From the standpoint of the remote customer, there is no difference; it feeds all data to a central location and receives specialized data (such as payroll or tax processing) from elsewhere.


Central Data Repository
Payroll Server
DL Node 1
DL Node 2
DL Node 3

Dynamic data sharing

The Distributed Administration application follows a store-and-forward replication methodology, where data is collected in real time and placed into a holding file. Once new or revised data has been replicated (copied into a holding file), it can be distributed to other locations on your network. This form of dynamic data sharing allows much faster and more efficient updates to the locations where the data is being used. The holding file also acts as a recovery facility that permits reextraction of previously transmitted data for resubmission to a requesting site.

The FILE08 Replication Holding File

The Replication Holding File (FILE08) contains records of those changes made on the local computer that may be distributed to other locations at some point in time (determined by you). If the local distribution rules dictate that these updates be shared with a particular DL, they will be copied to the Replication Packet File (FILE21) for that DL.

Note: Each FILE21 is target-specific. There may be as many target-specific Replication Packet Files as there are target DLs.

The FILE20/21 Replication Packet File

The Replication Packet File (FILE21) contains those updates ready to be distributed to a node on the network; FILE20 contains updates obtained from other nodes on the network.

Replication versus distribution

Simply because data is replicated (copied into a holding file), does not mean the data will be distributed to other locations throughout the network. Data changes are distributed to other locations based entirely on how the source DL's distribution rules are configured. Likewise, your local DL (acting as a target DL) will only receive those data changes from remote locations that the remote DL administrators allow your site to receive. If the source DL's distribution rules restrict your target DL's access to specific data changes, you will not be able to access the specified data.

Data types that can be replicated and distributed

All data on each DL will not necessarily be replicated. For instance, each DL owns its own System Control Repository (FILE01). Only option lists and tables are replicated, and only replicated data may be distributed to other DLs.

Below is a list of the types of data that *will* be replicated, and thus, may be distributed:

- Any changes made to option lists and tables (except Distributed Administration tables) in the System Control Repository (FILE01)
- Any changes resulting from user input/revisions to the Employee Database (FILE02)
- Any changes resulting from batch processing (including payroll batch processing)

Extended Practice

1. Company A provides temporary services to other companies throughout a large metropolitan area. It maintains employee records on ten PCs at five different satellite locations in the area. Each satellite PC operator performs regular partial and complete system backups, then forwards system data to the main office on tape once a week. The main office performs payroll, tax, and HR benefits operations, as well as company reporting on four additional PCs. The main office operator must perform system updates, troubleshoot collision errors, answer questions from the other operations, and distribute updates to the other operations. Every time a data update is performed at the satellite operations, it takes a lot of resources and computer time.

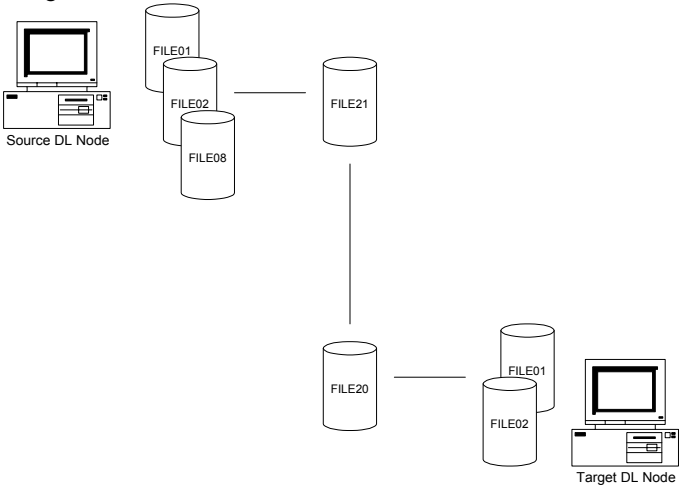
   How can Distributed Administration enhance Company A's operation?

2. Match The Solution Series file with its name and function.

   A FILE02
   B FILE21/20
   C FILE01
   D FILE08

   _____Used to maintain option lists
   _____Replication Packet File
   _____Used to hold local data changes
   _____Employee Database
   _____Used to hold sharable data
   _____System Control Repository
   _____Used to maintain company-specific data
   _____Replication Holding File

3. Draw a line through the process to identify where replication stops and distribution begins.



4. Place an 'X' next to the data types that may be replicated.

_____The Solution Series system update files
_____additional entry in option list DSP01
_____FILE01 (all)
_____company tax information
_____new employee information
_____Replication Distribution Program

Review of Questions Answered

1. What are the major functions or tasks performed by Distributed Administration?

2. What kinds of topologies are supported by Distributed Administration?

3. Which Cyborg-delivered programs are used to implement Distributed Administration?

4. What is the difference between replication and distribution?

5. What kinds of Solution Series data can be shared via Distributed Administration?

PART 2

Setup and Usage

In This Section

CHAPTER 3

Planning for Distributed Administration on your Network

In This Chapter

Introduction

Networks grow and change. Performing the pre-installation planning described in this section will allow your implementation of Distributed Administration to grow and change along with your network. If you plan your Distributed Administration implementation with the same amount of attention as you plan your network, there should be no future need to reinstall or revise your naming conventions.

Another issue that should be decided upon before installation is database update frequency. Each DL must perform an operation to retrieve data extracted for it by a source DL, then run another operation to apply the update locally. When should these operations be run? How often?

Depending on your system configuration, you may be able to automate update frequency. Alternatively, each node can run update operations periodically.

☞ *See the user documentation for your platform to learn about automatic update features.*

Tasks

This section explains the following:

- Assigning a person or group to administer Distributed Administration
- Selecting a Distributed Administration node naming convention
- Developing detailed dataflow maps
- Determining when to perform Distributed Administration updates
- Creating the Replication Holding File (FILE08)
- Identifying your local computer as a source DL

Prerequisites

Be familiar with the concepts introduced and discussed in Overview of Using Distributed Administration.

Questions answered

The following questions are answered in this section:

1. What are the Distributed Administration responsibilities of the system administrator?
2. Who 'owns' the data?
3. Why are naming conventions important when using Distributed Administration?
4. How can you ensure Distributed Administration data security?
5. What form is used to name your local (source) DL node?

System administration tasks

Performing the administrative tasks for Distributed Administration on your network involves varied implementation, configuration, and troubleshooting tasks, including initial setup, general maintenance, performance monitoring, and system updating.

Ownership of data

Data in a network implementing Distributed Administration belongs to the source DL. The source DL is the node responsible for distributing data changes according to its defined distribution rules.

Location naming conventions

Naming conventions may become a problem if not carefully planned. Distributed Location nodes are identified by a customer-defined, 5-character ID. This means it is up to you to make the ID meaningful.

You may decide to identify a node simply by city, region, or country; but what happens when an additional node is installed at the same location? What happens if your network expands and contracts periodically throughout the next 15 years? You certainly do not want to reconfigure each DL's distribution rules every six months, but with every naming convention there is the danger of losing meaning over time. For instance, you may have identified your nodes by city, but three years from now, your company pulls out of Toronto and New York and moves all offices to London.

The most important thing to remember is that once a node ID changes or is added or deleted, distribution rules on all other nodes that distribute changes to this target must be updated.

Here is an example of a naming convention you might employ:

BULNN, where:

- BU = Business or Division
- L = Location (could even be a building or a floor)
- NN = Number

If you have consistently imposed the 5-position alphanumeric naming convention described above to your DLs, adding a location is not a problem—just configure the node appropriately and configure distribution rules.

☞ *Refer to* **Selecting a Distributed Administration node naming convention** *(on page 33) to learn how to apply naming conventions to your DLs.*

Security considerations

Ensuring the security of each DL's data is very important, but intervention from a Security Officer is not necessary. The security provided by Distributed Administration adds a layer to the existing security developed for The Solution Series at your organization.

A password will be defined when a target DL's distribution rules are configured at the source DL site.

☞ *Refer to the Security Considerations section of the Technical Administration documentation for a more detailed discussion of security.*

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Assigning a person or group to administer Distributed Administration

To assign the appropriate person or group to administer Distributed Administration on your network, follow these steps:

1. Identify tasks required to administer the system on your network

Fill out the following table by identifying the tasks the administrator will be required to perform:

Administration Tasks	Yes	No
Design/Maintain Node ID Naming Convention		
Design/Maintain Detailed Dataflow Maps		
Design/Implement Security Passwords to Support Distributed Administration		
Configure/Maintain DLs		
Monitor Distributed Administration for Collision Errors, Process Errors, and General Status		
Troubleshoot Problems		
Perform Recovery Operations for DLs		
Apply Updates and/or Fixes to DLs		

2. Identify ideal intervals at which to perform Distributed Administration tasks

Fill out the table below to identify when administrative tasks should be performed:

Administration Tasks	D	W	M	Q	S	A	N
Design/Maintain Node ID Naming Convention	D	W	M	Q	S	A	N
Design/Maintain Detailed Dataflow Maps	D	W	M	Q	S	A	N
Design/Implement Security Passwords to Support Distributed Administration	D	W	M	Q	S	A	N
Configure/Maintain DLs	D	W	M	Q	S	A	N
Monitor Distributed Administration for Collision Errors, Process Errors, and General Status	D	W	M	Q	S	A	N
Troubleshoot Problems	D	W	M	Q	S	A	N
Perform Recovery Operations for DLs	D	W	M	Q	S	A	N
Apply Updates and/or Fixes to DLs	D	W	M	Q	S	A	N

Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Semiannually (S), Annually (A), or as Needed (N).

3. Decide which tasks should be centralized or if any should be handled at the DL site

Use the following table to identify where the Distributed Administration administrative task will be performed—at the physical DL site or from a remote office:

Administration Tasks	Local	Remote
Design/Maintain Node ID Naming Convention		
Design/Maintain Detailed Dataflow Maps		
Design/Implement Security Passwords to Support Distributed Administration		
Configure/Maintain DLs		
Monitor Distributed Administration for Collision Errors, Process Errors, and General Status		
Troubleshoot Problems		
Perform Recovery Operations for DLs		
Apply Updates and/or Fixes to DLs		

4. Identify appropriate procedural documentation (located in The Solution Series documentation)

For future reference, find the procedures relating to these administrative tasks and note where they are located.

5. Assign tasks

Consider the outcome of Steps 1 through 4 and make the appropriate assignments.

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Selecting a Distributed Administration node naming convention

To identify an appropriate DL naming convention, complete these steps:

1. **List your company's current divisions, buildings, countries, states, provinces, and so forth**

2. **List all possible divisions, buildings, countries, states, provinces, and so on**

3. **Identify a meaningful naming convention that can be easily explained and identified, and that allows for company expansion and contraction**

4. **Thoroughly document your naming convention for future reference**

Developing detailed dataflow maps

Complete the steps listed below to develop the detailed dataflow map required to successfully implement Distributed Administration on your network.

1. **Create a map of your current network configuration, identifying all servers and any DLs**

2. **Identify and map out your ideal data flow**

3. **Develop password security logic that supports your dataflow design**

4. **Test your dataflow against several company expansion/contraction scenarios**

5. **Thoroughly document your dataflow plan**

Determining when to perform Distributed Administration updates

To determine when to schedule updates, complete these steps:

1. **Decide on a standard update frequency**
   First decide what kind of data update sharing is required between your nodes. Is it necessary to update every node every four hours? Once a day? Once a week?

2. **Determine any special triggers that should precede an update**
   We list some general scenarios and suggestions in the following table. Which most closely matches your environment? Identify any other triggers you require.

Scenario	Suggested Triggers	Other Triggers
Company has peer-to-peer independent business units.	Quarterly closeout Organizational changes Tax year closeout Fiscal year closeout	
Company has peer-to peer independent business units, but payroll processing is performed by a shared server.	Payroll Quarterly closeout Organizational changes Tax year closeout Fiscal year closeout	
Company has hierarchical data distribution with a central database, but payroll processing and benefits administration are performed by independent servers.	Payroll Quarterly closeout Fiscal year closeout	

3. Determine what operations should immediately follow an update

Consider the triggers that you decided should precede an update. What about the operations that should immediately follow?

4. Schedule the Replication Distribution Program, Replication Reception Program, and Replication Application Program whenever appropriate for your environment

Creating the Replication Holding File (FILE08)

It is important to create the Replication Holding File (FILE08) on your system before you activate Distributed Administration. Follow these steps:

1. Create a Replication Management Program control record in FILE04

Control record format:

In these positions	Enter	Description
1–22	spaces	
23–28	DSCR08	Program name
29–80	spaces	

2. Execute the CBSVB program with FILE04 as input

The following are the input files, output files, and the program you need to execute:

INPUT	FILE04	Control record file
OUTPUT	FILE03 FILE09	Audit/message File Output-only reference to FILE08
EXECUTE	CBSVB	Core program name

Identifying your local computer as a source DL

Once you have identified a naming scheme, all nodes to be used for Distributed Administration on your network must be uniquely identified as source Distributed Locations (DLs).

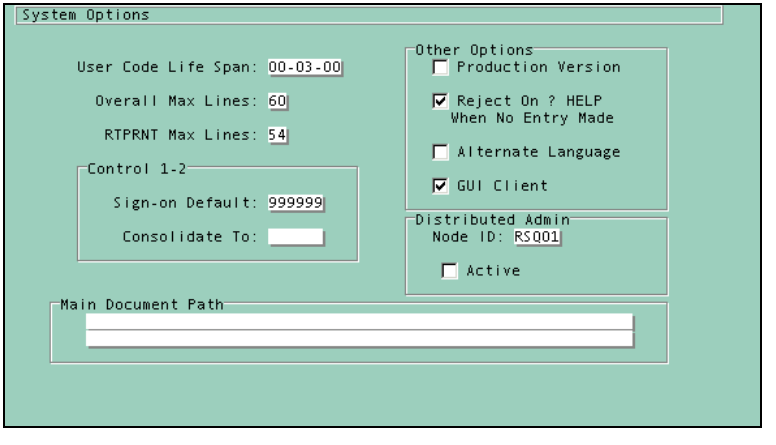
1. Access the System Options form (SCOPTS)

Access this form by making the following selection from the Navigator:

Component: Security
Process: Specify System Options
Task: System Options

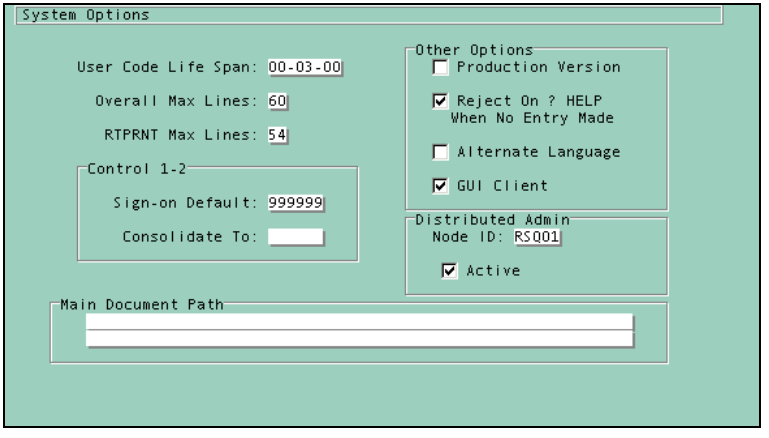
2. Enter the DL name of your local computer

Enter up to 5 alphanumeric characters to identify the local computer in the Node ID text box as a DL on the network.



3. Activate Distributed Administration

Click the Active check box to activate Distributed Administration on your local computer.



4. Click Save or press Enter

Changes made to data locally will now be replicated to the Replication Holding File (FILE08).

5. Sign off from The Solution Series

The next time you sign on, the Replication Holding File (FILE08) will be opened, along with FILE01 and FILE02.

Extended Practice

1. Company A provides temporary services to other companies throughout a large metropolitan area. It maintains employee records on ten PCs at five different satellite locations in the area. Each satellite PC operator performs regular partial and complete system backups, then forwards system data to the main office on tape once a week. The main office performs payroll, tax, and HR benefits operations, as well as company reporting on four additional PCs. The main office operator must perform system updates, troubleshoot collision errors, answer questions from the other operations, and distribute updates to the other operations. Every time a data update is performed at the satellite operations, it takes a lot of resource and computer time. How would you configure Distributed Administration to enhance Company A's operation?

Part 1

What topology will you use? Draw a map of the company computer system, using the topology you selected.

Part 2

Create a Node-naming convention that allows for company expansion/contraction. Write the names of the nodes on the map you created for Company A.

Document (describe it) here, then apply it to the diagram you drew in Part 1.

Part 3

Draw arrows on the map you drew in Part 1 indicating how the data should be routed and what data will be shared with which nodes.

List any kind of information you do NOT want to route here.

Part 4

Briefly list three Distributed Administration tasks, whether each task should be performed locally at the DL site or by the system administrator at a central site only, the intervals at which these tasks should be performed, and any additional or special triggers that should precede a task.

Task	Central or Local	Interval	Triggers

2. Name your local computer and activate Distributed Administration.

Review of Questions Answered

1. What are the Distributed Administration responsibilities of the system administrator?

2. Who 'owns' the data?

3. Why are naming conventions important when using Distributed Administration?

4. How can you ensure Distributed Administration data security?

5. What form is used to name your local (source) DL node?

CHAPTER 4

Configuring a Distributed Location

In This Chapter

Introduction

Your implementation of Distributed Administration is unique to your organization, but there are general principles of every Distributed Administration implementation: you must decide what information will be shared among nodes, and you must decide how to identify each node. This section is about taking the decisions you made regarding Distributed Administration network design and applying them to your network. The basic building block of every Distributed Administration implementation is the configuration of the Distributed Locations (DLs) on the network.

Tasks

This section explains the following:

- Authorizing a target DL
- Identifying data types that may be distributed
- Establishing distribution rules
- Revising distribution rules
- Deleting a record from the Distribution Rules Table
- Deleting a record from the Distribution Access Log Table
- Deleting a target DL

Prerequisites

Before proceeding to the operations described in this section, the following procedures must be completed:

- Assign a person or group to administer Distributed Administration
- Select a Distributed Administration node naming convention
- Develop detailed dataflow maps
- Determine DL database update frequency
- Name each DL

Refer to **Planning for Distributed Administration on your Network** *(on page 25) for more information on these prerequisite procedures.*

Questions answered

The following questions are answered in this section:

1. What are distribution rules?
2. What forms are accessed when configuring the distribution rules for a target DL node?

Distribution rules

Distribution rules allow the data owner (source DL) to control what, if any, information is to be made available to a specific target DL. Any target node can request information, but the source node's distribution rules determine exactly what data it will or will not share with a target.

Cyborg's configurable distribution rules have been developed to allow complete source DL control. The rules have also been made easy—you simply select those data types you do NOT want the specified target DL to access or indicate you want no exclusions.

☞ *Refer to the* **Establishing distribution rules** *(on page 46) to learn how to configure your DL.*

Dual roles: each node is a source and a target DL

When you configure your DL, you are configuring it as both a source and a target. It will presumably have information to offer other sites, and it will require updates to its own data due to changes made at other node sites.

Setting your node up as a target node is easy—just name it, so other nodes can refer to it as a target for their data. Setting your node up as a source DL is also easy—just set up distribution rules for the target DLs that are authorized to share your data.

During a recovery operation, your source DL is its own target DL. You will need to set up distribution rules for your source node whenever you perform a data recovery operation.

☞ *Refer to the* **Establishing distribution rules** *(on page 46) to learn how to configure your DL.*

Security

A password will be defined when the distribution rules for a particular target DL are configured.

Note: This password should periodically be changed.

☞ *Refer to* **Authorizing a target DL** *(on page 44) for detailed instructions on setting up the password on the Distributed Location Node Control form (DSNODE).*

☞ *Refer to* **Performing Distributed Administration Operations** *(on page 55) for a more detailed description of the control record containing the security password.*

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Authorizing a target DL

Before data can be distributed to a target DL, you must identify it as a valid recipient of your data. Follow these steps:

1. Access the Distributed Location Node Control Table form (DSNODE)

Access this form by making the following selection from the Navigator:

Component: Distributed Administration
Process: Location Node Control Table
Task: Distributed Location Node Control Table

2. Enter the alphanumeric 5-character node ID

This is the Distributed Location node ID of the target DL.

To see a current list of configured nodes, click the Select button.

3. Identify the node's machine (platform) type

Click the list box and select the platform type that matches the target node's computer. This identifies the data format your system will provide to the target DL.

4. Enter the node's 18-position security password

Up to 18 alphanumeric characters are allowed when creating a Distributed Administration security password. This password must be known by the target DL when it seeks distributed data from your source node.

5. Indicate if you want to allow distribution of FILE01 option lists and/or tables

Click the appropriate check box(es) to indicate if you want to allow distribution of FILE01 option list and table information.

Note: If you plan on distributing option lists and/or tables from the System Control Repository, a 'ZFILE1' organization must be configured on the Distribution Access Log Table form for the target DL that will be given access.

6. Click Save or press Enter

The form displays the message ----New table entry has been established---- and allows you to access other Distributed Location forms. You may click the button for the Distribution Access Log Table form to toggle to that form and begin identifying data that may be distributed to the authorized target DL. Click the button for the Machine Parameters Table form to view platform and data type information about the target DL.

Note: We recommend that you authorize the local (source) computer as a target DL, as well.

Identifying data types that may be distributed

To make data from a specific organization available for distribution, follow these steps:

1. Access the Distribution Access Log Table form (DSRULE)

Access this form by making the following selection from the Navigator:

Component: Distributed Administration
Process: Distribution Rules/Log Table
Task: Distribution Access Log Table

2. Identify the target DL

Enter the 5-position alphanumeric Node ID of a target DL.

3. Enter a valid organization ID (Control 1-2) associated with the source DL

Enter a 6-position organization identifier. By entering the ID here, you are indicating that the associated data from the source node may be distributed to this target DL.

Note: If you plan on distributing option lists and/or tables from the System Control Repository, a 'ZFILE1' organization must be configured on the Distribution Access Log Table form for the target DL that will be given access. Otherwise, the user will receive a FILE01 error.

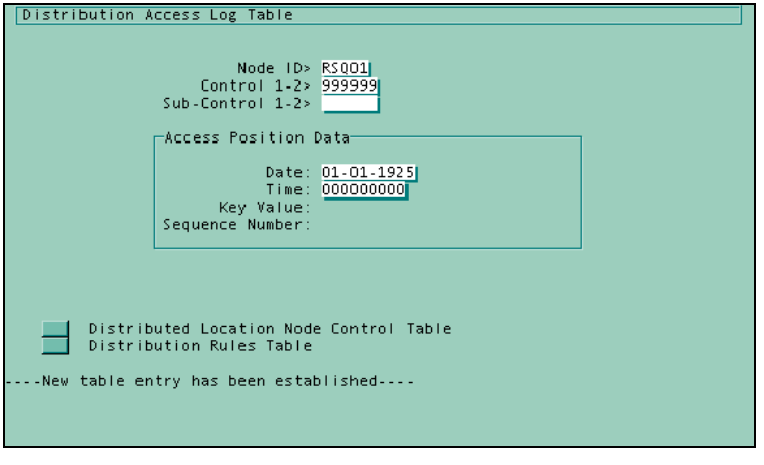
4. Enter date to initiate distribution for this DL

Enter a date in the format MM-DD-CCYY or CCYYMMDD (US and Canada) or DD-MM-CCYY or CCYYDDMM (elsewhere). This date may be the current date, a previous date, or a future date that tells the system to begin distributing data.

Note: Cyborg suggests you enter a date that has already passed, such as 19250102 (January 2, 1925).

5. Click Save or press Enter

The Date text box changes to the format MM-DD-CCYY (US and Canada) or DD-MM-CCYY (elsewhere) and the Time text box is populated by zeroes. The form displays the message ----New table entry has been established----. Data distribution for this target DL is initialized.



6. Repeat steps 3, 4, and 5 for every organization

7. Repeat the entire procedure for each target node

Establishing distribution rules

To limit what data the target DL will be allowed to receive, you must set up distribution rules on your source DL for that target DL. Follow these steps:

1. Access the Distribution Rules Table form (DSRF02)

Access this form by making the following selection from the Navigator:

Component: Distributed Administration
Process: Employee Master Distribution Rules
Task: Distribution Rules Table

2. Identify the target DL

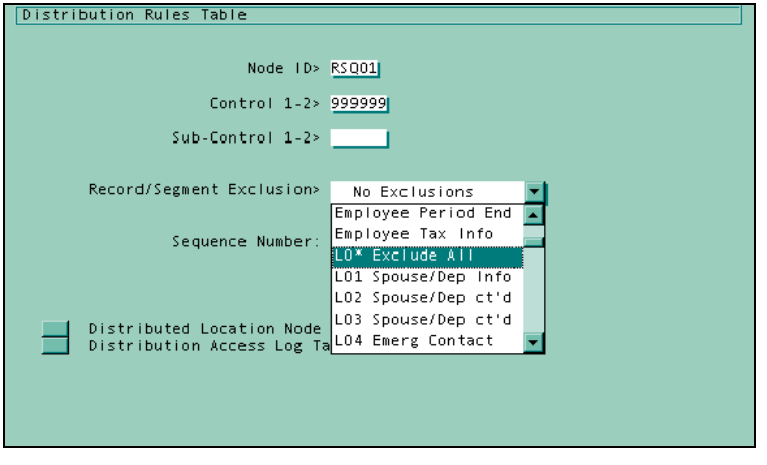
Enter the 5-position alphanumeric Node ID of a target DL.

3. Enter a valid organization ID associated with the source DL

Enter a 6-position identifier. By entering the ID here, you are indicating that the distribution rules you are about to configure (or view) are for the data associated with this organization.

4. Select records that should NOT be distributed to the target DL

Click the list box to identify any records you do not wish the target DL to have access to or select 'No Exclusions' to indicate that all replicated data is to be distributed to this target DL.

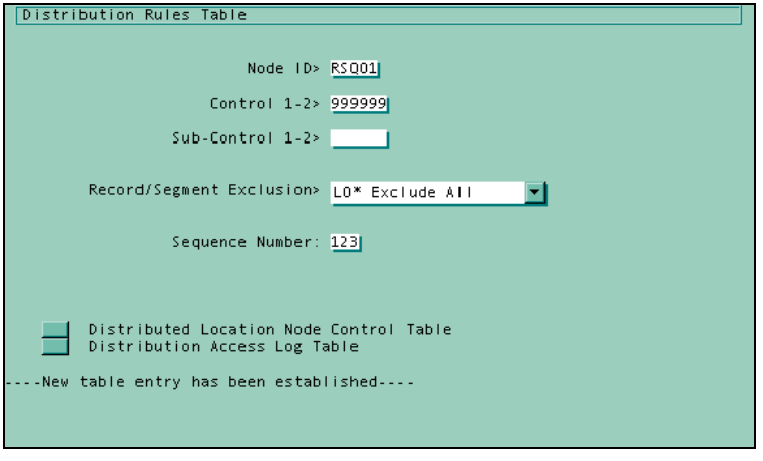


5. Type an entry in the Sequence Number text box

This text box must have a three-digit entry (*any* three-digit entry) in order for the system to process the distribution rules defined.

6. Click Save or press Enter

The form displays the message ----New table entry has been established---- and allows you access to other Distributed Administration forms. You may click one of these buttons to toggle to that Distributed Administration form.



7. Repeat steps 3 through 6 for every organization

8. Repeat the entire procedure for each target node

Note: *We recommend you set up distribution rules for the local (source) computer as a target DL to have no exclusions in case you need to perform a Recovery operation at any time in the future.*

Revising distribution rules

If you decide to change the distribution rules for a target DL, follow these steps:

1. Access the Distribution Rules Table (DSRF02) form

Access this form by making the following selection from the Navigator:

Component: Distributed Administration
Process: Employee Master Distribution Rules
Task: Distribution Rules Table

2. Select the record to be changed

Enter the five-position node ID in the Node ID text box and press Enter.

To see a current list of configured nodes, click the Select button. Then click the entry to be changed.

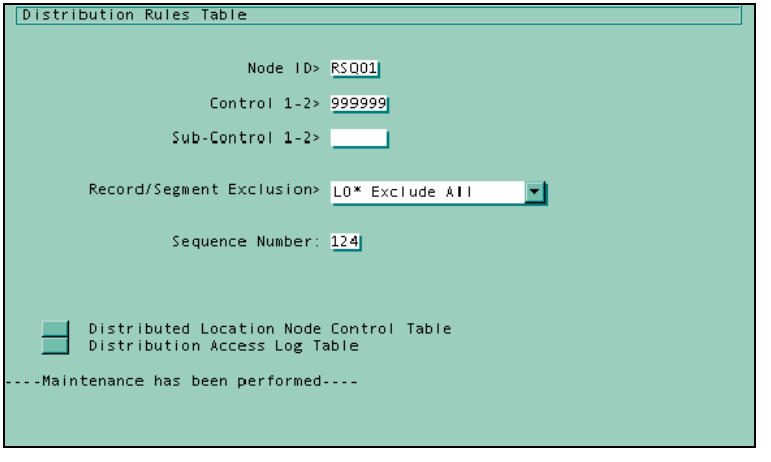
3. Type an entry in the Sequence Number text box

This is the only non-key text box on the form. Changing any other text box or list box on the form will create a new entry.

This text box must have a three-digit entry (*any* three-digit entry) in order for the system to process the distribution rules defined.

4. Click Save or press Enter

The form displays the message ----Maintenance has been performed---- and allows you access to other Distributed Administration forms. You may click one of these buttons to toggle to that Distributed Administration form.



Deleting a record from the Distribution Rules Table

If you want to remove a target DL from the list of authorized target DLs for a source DL, this is the first task you must complete. To remove the target DL's record from the Distribution Rules Table, follow these steps:

1. Access the Distribution Rules Table form (DSRF02)

Access this form by making the following selection from the Navigator:

Component: Distributed Solution
Process: Employee Master Distribution Rules
Task: Distribution Rules Table

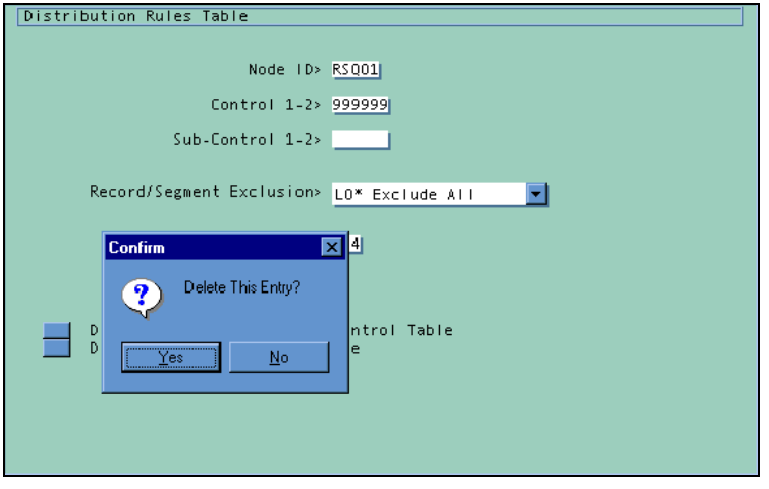
2. Identify the target DL

Type the five-position node ID in the Node ID text box and press Enter.

To see a current list of configured nodes, click the Select button. Then click the entry to be changed.

3. Click the Delete button

Click the Delete button to delete the table.



4. Click Yes

Click Yes on the Confirm dialog box. The target DL's record is removed from the Distribution Rules Table. The form displays the first table record and displays the message ----Table Record has been deleted----.

Deleting a record from the Distribution Access Log Table

If you want to remove a target DL, this is the second task you must complete. You must have already removed all target DL records from the Distribution Rules Table. To delete a target DL's record from the Distribution Access Log Table, follow these steps:

1. Access the Distribution Access Log Table form (DSRULE)

Access this form by making the following selection from the Navigator:

Component: Distributed Administration
Process: Distribution Rules/Log Table
Task: Distribution Access Log Table

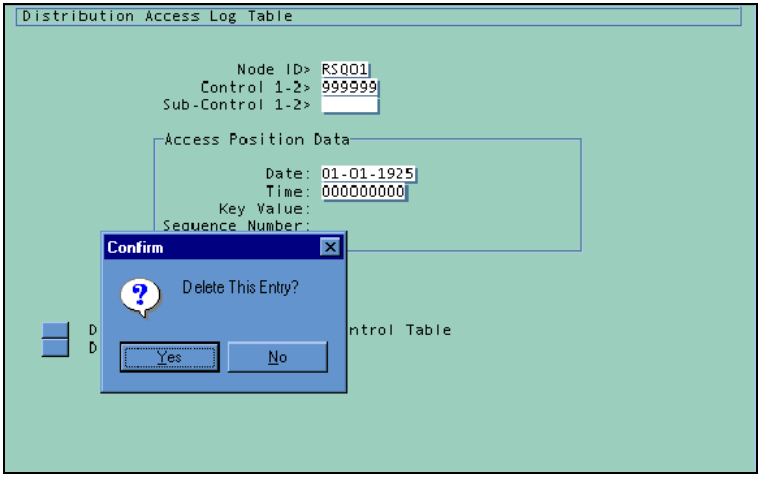
2. Identify the target DL

Type the five-position node ID in the Node ID text box and press Enter.

To see a current list of configured nodes, click the Select button. Then click the entry to be changed.

3. Click the Delete button

Click the Delete button to delete the table.



4. Click Yes

Click Yes on the Confirm dialog box. The target DL's record is removed from the Distribution Access Log Table. The form displays the first table record and displays the message ----Table Record has been deleted----.

Deleting a target DL

If you want to remove a target DL, this is the third task you must complete. You must have already removed the target DL's record from the Distribution Rules Table and the Distribution Access Log Table. To remove the target DL from the Distributed Location Node Control Table, follow these steps:

1. Delete the associated Distribution Rules Table form (DSRF02)

☞ *Refer to* **Deleting a record from the Distribution Rules Table** *(on page 49) to learn how to perform this step.*

2. Delete the associated Distribution Access Log Table (DSRULE) form

☞ *Refer to* **Deleting a record from the Distribution Access Log Table** *(on page 50) to learn how to perform this step.*

3. Access the Distributed Location Node Control Table form (DSNODE)

Access this form by making the following selection from the Navigator:

Component: Distributed Administration
Process: Location Node Control Table
Task: Distributed Location Node Control Table

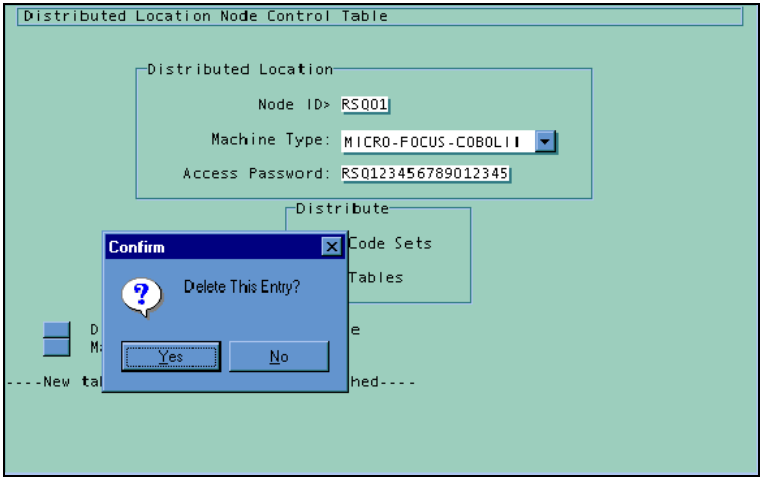
4. Identify the target DL

Type the five-position node ID in the Node ID text box and press Enter.

To see a current list of configured nodes, click the Select button. Then click the entry to be changed.

5. Click the Delete button

Click the Delete button to delete the table.



6. Click Yes

Click Yes on the Confirm dialog box. The target DL is removed from the Distributed Location Node Control Table. The form displays the first table record and displays the message ----Table Record has been deleted----.

Extended Practice

1. Authorize a target DL.
2. Identify the types of data that may be distributed to the target DL.
3. Establish distribution rules for that DL.
4. Delete the distribution configuration for the target you just configured.

Review of Questions Answered

1. What are distribution rules?

2. What forms are accessed when configuring distribution rules for a target DL node?

CHAPTER 5

Performing Distributed Administration Operations

In This Chapter

Introduction

Configuration is just the beginning. Now, consider the operations you will perform more frequently. Such operations may include distributing the replicated data or updating a DL with new data from other nodes—perhaps even updating files due to changes made during the payroll process. In this section we discuss and perform operations that will be incorporated into your usual jobstreams, as well as some less frequent operations, such as recovering lost or corrupted data.

Tasks

This section explains the following:

- Sending new, changed, and deleted data to a Replication Packet File (FILE21)
- Obtaining the data updates your target DL is authorized to obtain
- Applying new, changed, and deleted data locally
- Running the Replication Management Program during regularly scheduled backups
- Running the Replication Management Program online
- Displaying the Replication Holding File (FILE08)
- Interpreting Distributed Administration diagnostic reports
- Identifying errors
- Logging revisions and applying new data resulting from the payroll process

Prerequisites

Before proceeding to the operations described in this section, the following procedures must be completed:

- Name your source DL
- Identify target DLs
- Establish the DL's distribution rules

☞ *Refer to* **Configuring a Distributed Location** *(on page 39) for detailed instructions for performing these tasks.*

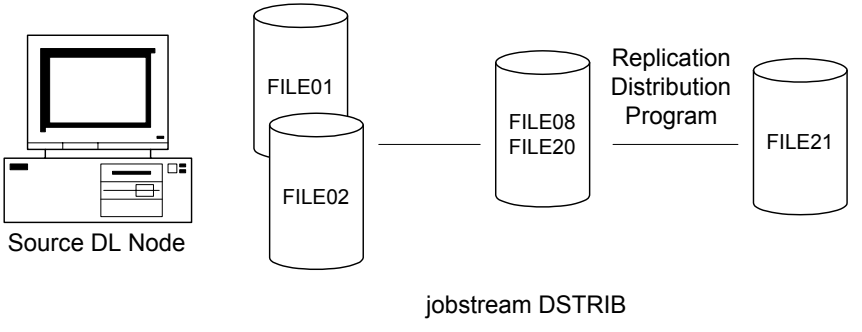
Questions answered

The following questions are answered in this section:

1. What program is used to recover lost data from a Replication Holding File (FILE08)?
2. What program is used to log data revisions and update DLs (local and remote) during the payroll process?
3. What is the difference between a recovery operation and a distribution operation?
4. What is a collision error? What can you do about it?

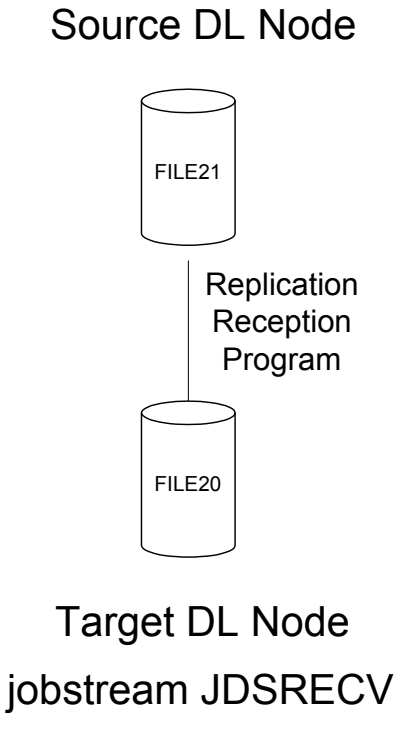
Data distribution

Data distribution occurs when the Replication Distribution Program is run on a source DL. It applies your configured distribution rules to your Data Replication File (FILE08) and data segments authorized to be shared with a target DL are copied to the local Replication Packet File (FILE21). If the source DL and the target DL are running on different platforms, the file is converted from the source DL-specific machine format to a neutral format for file transfer.



Data reception

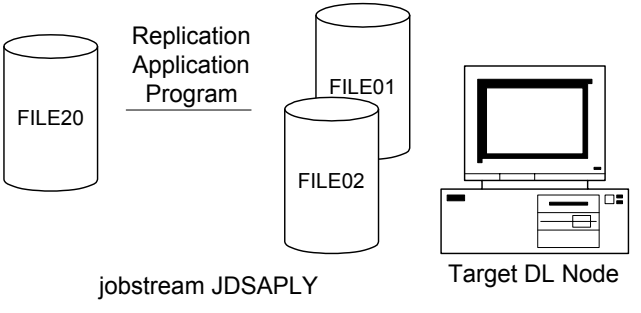
Data reception occurs when the Replication Reception Program is run on the target DL. If the source DL and the target DL are running on different platforms, it converts the source DL's Replication Packet File (FILE21) from its neutral file transfer format to a format specific to the target DL machine type (FILE20).



Data application

Data application occurs when the Replication Application Program is run on the target DL. It updates your System Repository File (FILE01) and Employee Database (FILE02).

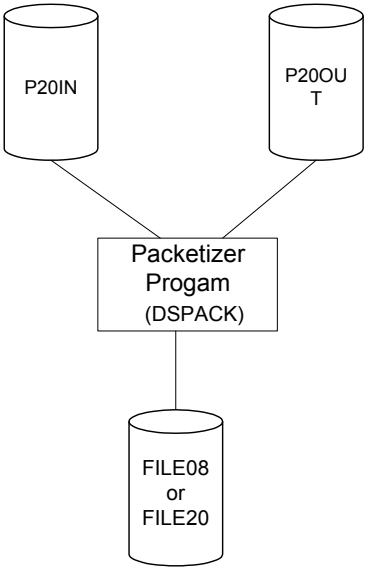
Note: *Although local application transactions (changes to the DL's FILE01 and FILE02) are logged into FILE08 when they occur, this is not the case when these changes occur because of a Replication Application Program operation. If you want to update FILE08 with all changes made to the DL, whether by local data entry or by the changes applied from a source DL during a Replication Application Program operation, you can set up your Replication Application Program control record to do so by setting a switch in position 31.*



Payroll impact

The payroll process is a complex operation that may affect data. Changes that occur during the payroll process can be tracked, then be used to update the source DL, as well as target DLs. Distributed Administration offers the Packetizer (DSPACK) COBOL program as part of the DSYBMST library, used specifically to compare P20 files and log the differences. This program is generally run after the pay run, but before the Pay Merge process.

The Packetizer program reads two P20 master files, generally P20IN and P20OUT files input to and output from a batch payroll run. Each record is read and differences are written either to the local FILE08 or FILE20, depending on the configuration of the P05RDR control record.



jobstream JDSPACK

Note: The FILE08 is indexed and the FILE20 is sequential in form. You may wish to direct record differences to FILE20 to improve performance (it may be faster).

Collision errors

Collision errors occur during a data application operation when an update is being applied to the local computer (target DL) but the local data is not different. This means a change was improperly made locally. These errors will also appear on the DSAPLY Diagnostic report.

Note: The target of the collision error is NOT updated.

Record length errors

Record length errors occur when two systems sharing data have different expansion values. If the source DL allows 32 Kbytes for an employee record and the target DL only allows 20Kbytes, any record from the source DL exceeding 20Kbytes will cause a record length error at the target DL. These errors will appear on the DSAPLY Diagnostic report.

Note: *The target of the length error is NOT updated.*

☞ *Refer to the Technical Administration documentation to learn how to revise expansion values.*

Data retention in FILE08

The Replication Holding File (FILE08) must be purged periodically via the Replication Management Program. As delivered, this program does not purge all data in the file, but only that data seven days older than the oldest distribution date. You may change the retention period by editing the Cyborg Scripting Language source code for the FILE08 Management Program. You may view the Replication Holding File online by accessing the Display Replication Holding File form.

Summary of Distributed Administration programs

The table below lists the major operations performed as part of Distributed Administration and the associated programs used to perform them:

Operation Performed	Program Used
Data distribution (from FILE08/FILE20 to FILE21)	Replication Distribution (DSTRIB)
Data reception (from FILE21 to FILE20)	Replication Reception (DSRECV)
Data application (from FILE20 to FILE01 and FILE02)	Replication Application (DSAPLY)
FILE08 data retention	Replication Management (DSCL08)
Payroll update	Packetizer (DSPACK)
FILE08 creation	Replication Management (DSCR08)

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Sending new, changed, and deleted data to a Replication Packet File (FILE21)

If you want to distribute or make local updates available for other nodes, follow these steps:

1. Create a Replication Distribution Program (DSTRIB) control record in FILE04

Control record format:

In these positions	Enter	Description
1–6	DSTRIB	Replication Distribution program
7–11	*****	5-position alphanumeric target DL ID
12–12	Y or N	Y = Direct file transmission (via middleware) N = Indirect file transmission (manual creation of file on local platform)

In these positions	Enter	Description
13–14	08 or 20	08 = FILE08 input source 20 = FILE20 input source
15–32	**********	Password of target node
33–80	spaces	

Example:

```
          1    1    2    2    3    3    4    4    5     8
0....5....0....5....0....5....0....5....0....5....0....5....0 ... 0
 DSTRIB12345N08PASSWORD
```

2. Execute the Replication Distribution Program (DSTRIB) with FILE04 as input

The following are the input files, output files, and the program you need to execute:

INPUT	FILE04 FILE08 or FILE20	Control record file Replication Holding File or Replication Packet File
OUTPUT	FILE03 FILE21	Audit/message File Replication Packet File (output only)
EXECUTE	DSTRIB	Replication Distribution Program

Obtaining the data updates your target DL is authorized to obtain

Note: The FILE21 should already have been transferred to the target DL via your usual transfer method (for example, disk, tape, modem, and so forth).

If you want to receive, or obtain, data updates locally, follow these steps:

1. Create a Replication Reception Program (DSRECV) control record in FILE04

Control record format:

In these positions	Enter	Description
1–6	DSRECV	Program name
7–80	spaces	

Example:

```
          1    1    2    2    3    3    4    4    5 ... 8
0....5....0....5....0....5....0....5....0....5....0....5....0 ... 0
  DSRECV
```

2. Execute the Replication Reception Program (DSRECV) with FILE04 and target-specific FILE21 created by the source DL as input

The following are the input files, output files, and the program you need to execute:

INPUT	FILE04 FILE21	Control record file Replication Packet File
OUTPUT	FILE03 FILE20	Audit/message File Replication Packet File
EXECUTE	DSRECV	Replication Reception Program

Applying new, changed, and deleted data locally

If you want to update your local data with updates generated from another DL, follow these steps:

1. Create a Replication Application Program control record in FILE04

Control record format:

In these positions	Enter	Description
1–22	spaces	
23–28	DSAPLY	Program name
29–29	Y or N	Y = update FILE08 N = do not update FILE08 (default)
30–80	spaces	

Example:

```
          1    1    2    2    3    3    4    4    5     8
0....5....0....5....0....5....0....5....0....5....0 ... 0
                        DSAPLYY
```

2. Execute the CBSVB program with FILE04 and the target-specific FILE20 obtained from the source as input

The following are the input files, output files, and the program you need to execute:

INPUT	FILE04 FILE20	Control record file Replication Packet File
OUTPUT	FILE01 FILE02 FILE03 FILE08	System Control Repository Employee Database Audit/message File Replication Holding File (may be updated)
EXECUTE	CBSVB	Core program name

Running the Replication Management (DSCL08) Program during regularly scheduled backups

When you run the Replication Management Program as part of a system backup process, your Replication Holding File (FILE08) is purged of any records more than one month older than the last distribution date.

1. Create a Replication Management Program (DSCL08) control record in FILE04

Control record format:

In these positions	Enter	Description
23–28	DSCL08	Program name

Example:

```
          1    1    2    2    3    3    4    4    5     8
0....5....0....5....0....5....0....5....0....5....0....5....0 ... 0
                       DSCL08
```

2. Execute the CBSVB program with FILE04 as input

The following are the input files, output files, and the program you need to execute:

INPUT	FILE04 FILE08	Control record file Replication Holding File
OUTPUT	FILE03 FILE08	Audit/message File Replication Holding File
EXECUTE	CBSVB	Core program

3. Insert the CBSVB program reference in your jobstream as part of the regular backup process

Running the Replication Management Program (DSCL08) online

When you run the Replication Management Program online, your Replication Holding File (FILE08) is purged of any records older than one month prior to the oldest distribution date.

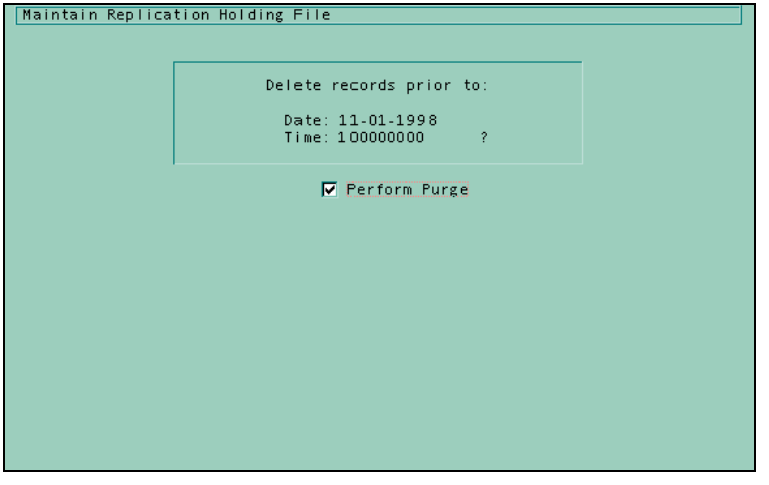
1. Access the Maintain Replication Holding File form (DSCL08)

Access this form by making the following selection from the Navigator:

Component:  Distributed Administration
Process: Maintain Replication Holding File
Task:  Maintain Replication Holding File

2. Click the Perform Purge check box

Click the Perform Purge check box to indicate a purge is to take place.



3. Click Save or press Enter

The Replication Holding File (FILE08) is purged of records older than one month prior to the oldest distribution date.

Displaying the Replication Holding File (FILE08)

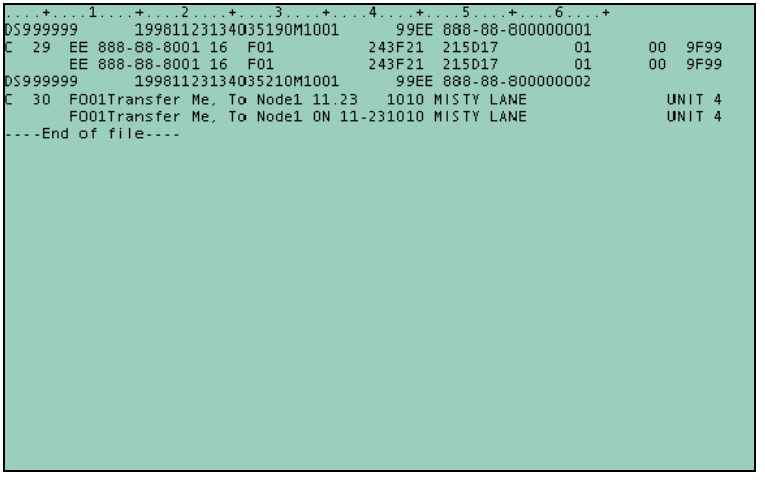
Use this form to display the status of the Replication Holding File (FILE08).

Access the Display Replication Holding File form (DSP08)

Access this form by making the following selection from the Navigator:

Component:	Distributed Administration
Process:	Display Replication Holding File
Task:	Display Replication Holding File

Changes to option lists and tables, as well as payroll, company, and employee information are displayed:



Interpreting Distributed Administration diagnostic reports

There are several diagnostic reports available that relate directly to Distributed Administration operations. The report you obtain depends on the role of your local DL in the operation performed.

For instance, even though a source and target DL participate in the same transaction (file transfer of updated data from one to the other) the DLs generate different reports. The source DL performs the Replication Distribution Program (DSTRIB) operation and generates a DSTRIB Diagnostic Report. The target DL performs the Replication Reception Program (DSRECV) operation and generates the DSRECV Diagnostic Report.

Note: If you want to compare these reports to identify any anomalies, you must make your own arrangements to share reports between nodes.

If you want to review a diagnostic report, follow these steps:

1. Print out the reports as part of the regular jobstream

If you regularly print system reports as part of your regular jobstream, do so with these reports, as well. Otherwise, you may want to route the online output files to viewing queues for later retrieval.

2. Review the 'PROCESSING STATISTICS' section at the end of the report and compare statistics

Compare the 'PROCESSING STATISTICS' section at the end of each transaction report (for example, compare the DSTRIB and DSRECV reports for a single distribution between a source and target node).

Identifying errors

If you want to correct errors that occurred during the application of data changes, follow these steps:

1. Review the DSAPLY Processing Report

This report simply lists errors encountered and identifies them for your troubleshooting.

2. Review the records causing CE (collision) and RL (record length) errors

Collision errors should never occur. If they do, it means the data at the target DL side of the distribution has already been changed in some way. You must determine if the data is indeed in error and a revision is necessary, or if the data at both ends of the distribution is correct.

Record length errors must be dealt with systematically. Any time this error is received, it is an indication of a larger problem: configuration compatibility between nodes (DLs).

3. Make any necessary changes

- For CE errors, disable Distributed Administration at the faulty location, revise the records to reflect the correct data, then enable Distributed Administration.
- For RL errors, make record length compatible between DLs, then either make changes to the records manually, restore the target DL's original FILE01, FILE02, and FILE08 (if the DSAPLY control record used during the first application called for updating FILE08), or reapply the changes.

Logging revisions and applying new data resulting from the payroll process

If you want to replicate and distribute data updates resulting from a payroll process, follow these steps:

1. Create a P05RDR control record

Control record format:

In these positions	Enter	Description
1–6	DSPACK	Program name
7	Y or N	Y = Drop Timecards (FFT), Batch (FFB), and Adjustments (FFK) records from the payroll process N = Write Timecards (FFT), Batch (FFB), and Adjustments (FFK) records to output file 'Y' is the default; a space is the same as 'Y'
8	Y or N	Y = Write Labor records to output file N = Do not write Labor records from the payroll process 'Y' is the default; a space is the same as 'Y'
9	Y or N	Y = Write Payment History records to output file N = Do not write Payment History records to output file 'Y' is the default; a space is the same as 'Y'

In these positions	Enter	Description
10	Y or N	Y = Write H records (tax specification records) to output file N = Do not write H records (tax specification records) to output file 'Y' is the default; a space is the same as 'Y'
11	Y or N	Y = FILE08 is output file N = FILE20 is output file 'Y' is the default; a space is the same as 'Y'
12	spaces	

Example:

```
          1    1    2    2    3    3    4    4    5     8
0....5....0....5....0....5....0....5....0....5....0....5....0 ... 0
 DSPACKN   N
```

2. Execute the Packetizer Program with FILE04 as P05RDR input

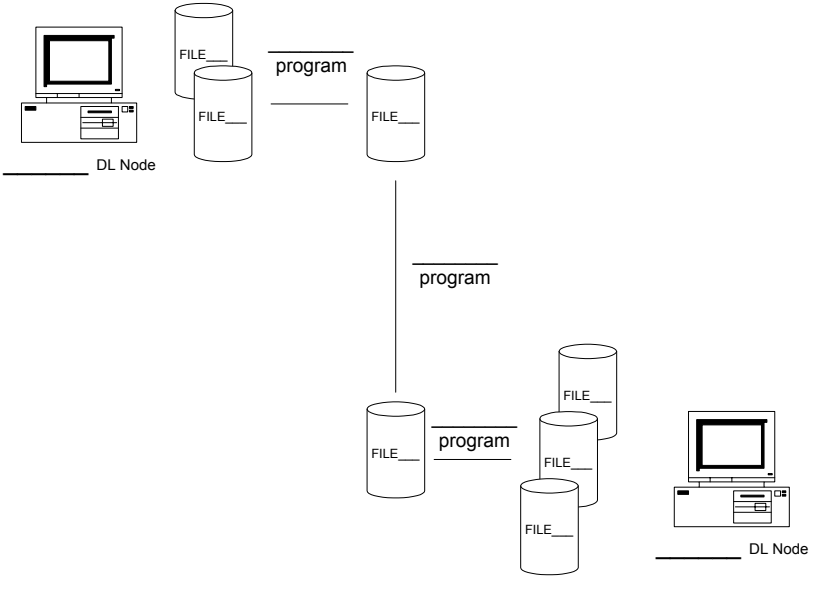
The following are the input files, output files, and the program you need to execute:

INPUT	P05RDR P20OLD P20NEW	Control record file Input Master to Batch Payroll Output Master from Batch Payroll
OUTPUT	PRINT1 FILE20 or FILE08	Audit/message file Replication Packet File or Replication Holding File
EXECUTE	DSPACK	Packetizer Program

3. Insert the Packetizer Program job between the pay run and pay merge processes

Extended Practice

1. The diagram below illustrates Distributed Administration . Complete the blanks in the diagram with the type of DL, files involved in the operation, and programs used to perform the Distributed Administration operation.



2. Note the pages where the control record examples are located for the following Distributed Administration operations:

   DSRECV **Page**_____
   DSPACK **Page**_____
   DSAPLY **Page**_____
   DSTRIB **Page**_____

3. Write the control record required to replicate and distribute data updates resulting from a recent pay run. Accept all defaults, but do not write Payment History records to the output file.

```
1    1    2    2    3    3    4    4    5    5    6 ... 8
0....5....0....5....0....5....0....5....0....5....0 ... 0
```

4. Perform an online purge of the Replication Holding File.

5. The reports that follow illustrate both ends of a distribution. The DSTRIB Diagnostic Report is generated at the source DL and the DSRECV Diagnostic Report is generated at the target DL. Circle the areas on the following reports where you can look to find problems.

```
DSTRIB DIAGNOSTIC REPORT                                                    PAGE     1
PROGRAM VERS. 36.00       *COPYRIGHT (C) 1998  CYBORG SYSTEMS, INC.   TIME 04:16:26 DATE 10/12/98
    OPTIONS USED IN THIS RUN
 DL      ---------- HOST ---------   -------- DL NODE ---------                          NEED
NODE    MACHINE    CODE   TO-DATE    MACHINE   CODE   TO-DATE   INPUT FILE   DIRECT     CONVERSION
PFG01      PC       ASCII    4B         PC      ASCII     4B        FILE08       N            N
          BATCH HEADER RECORD:              - RECORDS WRITTEN TO FILE21:           1
          CONTROL1-2/SUB-C1-2: 991111       - RECORDS WRITTEN TO FILE21:          11
          CONTROL1-2/SUB-C1-2: 993333       - RECORDS WRITTEN TO FILE21:         560
          CONTROL1-2/SUB-C1-2: 995555       - RECORDS WRITTEN TO FILE21:         364
          CONTROL1-2/SUB-C1-2: 996666       - RECORDS WRITTEN TO FILE21:         369
          CONTROL1-2/SUB-C1-2: 999999       - RECORDS WRITTEN TO FILE21:       6,916
          TRAILER RECORD:                   - RECORDS WRITTEN TO FILE21:           1
          BATCH TOTAL:       8,222
```

```
*****************************************************************************************
                          DSRECV DIAGNOSTIC REPORT                                PAGE     1
PROGRAM VERS. 36.00      COPYRIGHT (C) 1998  CYBORG SYSTEMS, INC.   TIME 09:15:20 DATE 10/12/98
       NO CONVERSION PERFORMED IN THIS RUN
          BATCH HEADER RECORD:              - RECORDS WRITTEN TO FILE20:           1
          CONTROL1-2/SUB-C1-2: 991111       - RECORDS WRITTEN TO FILE20:          11
          CONTROL1-2/SUB-C1-2: 993333       - RECORDS WRITTEN TO FILE20:         560
          CONTROL1-2/SUB-C1-2: 995555       - RECORDS WRITTEN TO FILE20:         364
          CONTROL1-2/SUB-C1-2: 996666       - RECORDS WRITTEN TO FILE20:         369
          CONTROL1-2/SUB-C1-2: 999999       - RECORDS WRITTEN TO FILE20:       6,916
          TRAILER RECORD:                   - RECORDS WRITTEN TO FILE20:           1
          BATCH TOTAL:       8,222
```

Review of Questions Answered

1. What program is used to recover lost data from a Replication Holding File (FILE08)?

2. What program is used to log data revisions and update DLs (local and remote) during the payroll process?

3. What is the difference between a recovery operation and a distribution operation?

4. What is a collision error? What can you do about it?

PART 3

Appendices

In This Section

APPENDIX A

Report Quick Reference

In This Appendix

Introduction

The Report Quick Reference provides a quick reference guide to the reports covered in this documentation.

DSTRIB Diagnostic Report (DISTRIB)

Business Purpose

This report provides detailed information about a specific distribution activity that has taken place at the source DL.

Navigation Access

This report is automatically generated at the source DL site when a Replication Distribution Program operation has been performed.

See also:

- Interpreting Distributed Administration diagnostic reports ***(on page 70)***
- Identifying errors ***(on page 70)***

DSTRIB Diagnostic Report (DISTRIB) - example

```
                                  DSTRIB DIAGNOSTIC REPORT                                  PAGE     1
PROGRAM VERS. 36.00       *COPYRIGHT (C) 1996  CYBORG SYSTEMS, INC.       TIME 09:14:46 DATE 11/12/2002
    OPTIONS USED IN THIS RUN

    DL      ---------- HOST ---------    -------- DL NODE ---------                              NEED
   NODE     MACHINE    CODE   TO-DATE    MACHINE   CODE   TO-DATE   INPUT FILE   DIRECT     CONVERSION

   PFG01      PC       ASCII    4B         PC      ASCII     4B        FILE08       N            N
         BATCH HEADER RECORD:               - RECORDS WRITTEN TO FILE21:           1
         CONTROL1-2/SUB-C1-2: 991111        - RECORDS WRITTEN TO FILE21:          11
         CONTROL1-2/SUB-C1-2: 993333        - RECORDS WRITTEN TO FILE21:         548
         CONTROL1-2/SUB-C1-2: 995555        - RECORDS WRITTEN TO FILE21:         364
         CONTROL1-2/SUB-C1-2: 996666        - RECORDS WRITTEN TO FILE21:         369
         CONTROL1-2/SUB-C1-2: 999999        - RECORDS WRITTEN TO FILE21:       6,916
         TRAILER RECORD:                    - RECORDS WRITTEN TO FILE21:           1
         BATCH TOTAL:       8,210
```

DSRECV Diagnostic Report (DSRECV)

Business Purpose

This report provides detailed information about a specific distribution activity that has taken place at the target DL.

Navigation Access

This report is automatically generated at the source DL site when a Replication Reception Program operation has been performed.

See also:

- Interpreting Distributed Administration diagnostic reports ***(on page 70)***
- Identifying errors ***(on page 70)***

DSRECV Diagnostic Report (DSRECV) - example

```
                          DSRECV DIAGNOSTIC REPORT                          PAGE     1
PROGRAM VERS. 36.00      COPYRIGHT (C) 1996  CYBORG SYSTEMS, INC.          TIME 09:15:20 DATE 11/12/2002
       NO CONVERSION PERFORMED IN THIS RUN

          BATCH HEADER RECORD:              - RECORDS WRITTEN TO FILE20:           1
          CONTROL1-2/SUB-C1-2: 991111       - RECORDS WRITTEN TO FILE20:          11
          CONTROL1-2/SUB-C1-2: 993333       - RECORDS WRITTEN TO FILE20:         548
          CONTROL1-2/SUB-C1-2: 995555       - RECORDS WRITTEN TO FILE20:         364
          CONTROL1-2/SUB-C1-2: 996666       - RECORDS WRITTEN TO FILE20:         369
          CONTROL1-2/SUB-C1-2: 999999       - RECORDS WRITTEN TO FILE20:       6,916
          TRAILER RECORD:                   - RECORDS WRITTEN TO FILE20:           1
          BATCH TOTAL:       8,210
```

DSAPLY Processing Report (DSAPLY)

Business Purpose

This report provides detailed information about the application of distributed data on the local system.

Navigation Access

This report is automatically generated at the source DL site when a Replication Application Program operation has been performed.

See also:

- Interpreting Distributed Administration diagnostic reports ***(on page 70)***
- Identifying errors ***(on page 70)***

DSAPLY Processing Report (DSAPLY) - example

```
                                DSAPLY PROCESSING REPORT

Total packet records read from FILE20 = 000008210

         Total Collision Errors found = 000000000
```

Packetizer Diagnostic Report (DSPACK)

Business Purpose

This report provides detailed information about the differences between the P20In and the P20OUT master files.

Navigation Access

This report is automatically generated at the source DL site when a Packetizer Program operation has been performed.

See also:

- Interpreting Distributed Administration diagnostic reports ***(on page 70)***
- Identifying errors ***(on page 70)***

Packetizer Diagnostic Report (DSPACK) - example

```
                                PACKETIZER DIAGNOSTIC REPORT                              PAGE     1
                                                                        TIME 10:33:30 DATE 08/14/2002
OPTIONS USED IN THIS RUN:
   DROP FFT: N  PROCESS LABOUR: N   PROCESS HISTORY: Y   PROCESS TAXES: Y   FILE08: Y
CONTROL 1: 99 ACME MANUFACTURING    CONTROL 2: 1111    CONSIDERED EARNINGS/HOURS    NODE ID:  NODEX
     PACKET RECORDS:                    7
        COMPANY:                        7
        TAX:
        OTHER:
        LABOR:                EXCLUDED
        HISTORY:
        PERM. MASTER:
CONTROL 1: 99 ACME MANUFACTURING    CONTROL 2: 3333    APPLICANT TRACKING CTL 1-2   NODE ID:  NODEX
     PACKET RECORDS:                  329
        COMPANY:                        7
        TAX:
        OTHER:
        LABOR:                EXCLUDED
        HISTORY:
        PERM. MASTER:                  322


                                PACKETIZER DIAGNOSTIC REPORT                              PAGE     2
                                                                        TIME 10:33:30 DATE 08/14/2002
CONTROL 1: 99 ACME MANUFACTURING    CONTROL 2:  5555   RETIREE CTL 1-2              NODE ID:  NODEX
     PACKET RECORDS:                  270
        COMPANY:                       11
        TAX:
        OTHER:
        LABOR:                EXCLUDED
        HISTORY:                        40

CONTROL 1: 99 ACME HOSPITALS        CONTROL 2: 6666    POSITION CONTROL CTL 1-2     NODE ID:  NODEX
     PACKET RECORDS:                  330
        COMPANY:                       35
        TAX:                            4
        OTHER:                          5
        LABOR:                EXCLUDED
        HISTORY:                      122
        PERM. MASTER:                 164

                                PACKETIZER DIAGNOSTIC REPORT                              PAGE     3
                                                                        TIME 10:33:30 DATE 08/14/2002
CONTROL 1: 99 ACME MANUFACTURING    CONTROL 2: 9999    PRODUCTION CTL 1-2            NODE ID:  NODEX
     PACKET RECORDS:                1,205
        COMPANY:                        7
        TAX:
        OTHER:                          6
        LABOR:                EXCLUDED
```

```
      HISTORY:                    85
      PERM. MASTER:            1,107
   PROCESSING STATISTICS:
   PREVIOUS MASTER:            2,655
   CURRENT MASTER:             2,436
   PACKET RECORDS:             2,141
      COMPANY:                    67
      TAX:                         4
      OTHER:                      11
      LABOR:               EXCLUDED
      HISTORY:                   247
      PERM. MASTER:            1,812
```

APPENDIX B

Program Quick Reference

These topics provide summarized instructions for performing a business task.

In This Appendix

Introduction

This Program Quick Reference provides a quick reference guide to the utilities and programs covered in this documentation.

FILE08 Creation (DSCR08)

This utility must be run in batch to create the Replication Holding File (FILE08) before Distributed Administration may be activated.

☞ *For additional information, refer to* **Planning for Distributed Administration on your Network** *(on page 25).*

See also:

- Running the Replication Management (DSCL08) Program during regularly scheduled backups ***(on page 67)***
- Running the Replication Management Program (DSCL08) online ***(on page 68)***

Packetizer (DSPACK)

This batch-only utility is used to compare the P20IN and the P20OUT master files. An output file containing the differences is generated.

☞ *For additional information, refer to* **Performing Distributed Administration Operations** *(on page 55).*

See also:

- Logging revisions and applying new data resulting from the payroll process ***(on page 71)***

Replication Application (DSAPLY)

This batch-only utility is used to apply data distributed from another computer (source DL) to the local computer (target DL) in order to share any changes.

☞ *For additional information, refer to* **Performing Distributed Administration Operations** *(on page 55).*

See also:

- Applying new, changed, and deleted data locally ***(on page 67)***
- Identifying errors ***(on page 70)***

Replication Distribution (DISTRIB)

This batch-only utility is used to copy (distribute) data that has been replicated from the source DL to a holding file and authorized for distribution. The Replication Packet File (FILE21) holds the data until the remote computer (target DL) retrieves the file.

☞ *For additional information, refer to* **Performing Distributed Administration Operations** *(on page 55).*

See also:

- Sending new, changed, and deleted data to a Replication Packet File (FILE21) ***(on page 65)***

Replication Management (DSCL08)

This utility may be run in batch or online to purge the Replication Holding File (FILE08) of any old data.

☞ *For additional information, refer to* **Performing Distributed Administration Operations** *(on page 55).*

See also:

- Running the Replication Management (DSCL08) Program during regularly scheduled backups ***(on page 67)***
- Running the Replication Management Program (DSCL08) online ***(on page 68)***

Replication Reception (DSRECV)

This batch-only utility is used to convert data received from a remote computer's Replication Packet File (FILE21) into a format usable by the target DL.

☞ *For additional information, refer to* **Performing Distributed Administration Operations** *(on page 55).*

See also:

- Obtaining the data updates your target DL is authorized to obtain ***(on page 66)***

APPENDIX C

Practice and Review Answers

In This Appendix

Overview of Using Distributed Administration

Practice

1. How can Distributed Administration enhance Company A's operation?

   Distributed Administration can reduce the time required for performing updates both at the central office and the satellite locations because only revisions to company and employee data are replicated. Additionally, these updates can be performed regularly and automatically, reducing the number of resource hours required to perform these functions. The most important benefit of applying Distributed Administration to Company A's business is that up-to-date information, including payroll and regulated areas such as OSHA and EEO (US) can be monitored in real-time.

2. Match The Solution Series file with its name and function.

   A FILE02

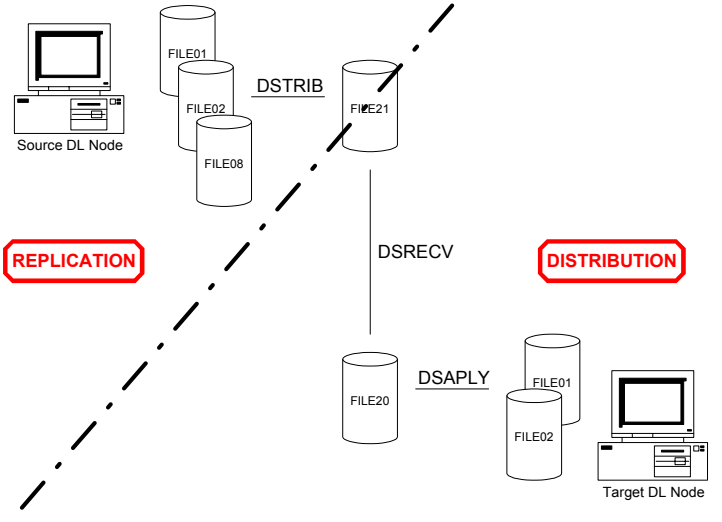
   B FILE21/20

   C FILE01

   D FILE08

C	*Used to maintain option lists*
B	*Replication Packet File*
D	*Used to hold local data changes*
A	*Employee Database (Master File)*
B	*Used to hold sharable data*
C	*System Control Repository (Control File)*
A	*Used to maintain company-specific data*
D	*Replication Holding File*

3. Draw a line through the process to identify where replication stops and distribution begins.



4. Place an 'X' next to the data types that may be replicated.

   _____The Solution Series *system update files*

   *X*____*additional entry in option list DSP01*

   _____*FILE01 (all)*

   *X*____*company tax information*

   *X*____*new employee information*

   _____*DSTRIB program*

Review

1. What are the major functions or tasks performed by Distributed Administration?

   Distributed Administration captures new data or changes to existing data. It allows different users at different locations to share new data or changed data without having to save, transfer, copy, and update the entire data repository.

2. What kinds of topologies are supported by Distributed Administration?

   Distributed Administration supports all the common topologies, including peer-to-peer, hierarchical, and specialized server topologies.

3. Which Cyborg-delivered programs are used to implement Distributed Administration?

   Replication Distribution Program (DSTRIB)

   Replication Reception Program (DSRECV)

   Replication Application Program (DSAPLY)

4. What is the difference between replication and distribution?

   All new data and revisions will be automatically replicated to FILE08, but only authorized data is distributed to other locations.

5. What kinds of Solution Series data can be shared via Distributed Administration?

   Any changes made to option lists and tables in the System Control Repository (Control File; FILE01), changes resulting from user input/revisions to the Employee Database (Master File; FILE02), or changes resulting from batch processing (including payroll batch processing).

Planning for Distributed Administration on your Network

Practice

1. How would you configure Distributed Administration to enhance Company A's operation?

   Part 1

   What topology will you use? Draw a map of the company computer system, using the topology you selected.

   Part 2

   Create a Node naming convention that allows for company expansion/contraction. Write the names of the nodes on the map you created for Company A.

   Document (describe it) here, then apply it to the diagram you drew in Part 1.

   Part 3

   Draw arrows on the map you drew in Part 1 indicating how the data should be routed and what data will be shared with which nodes.

   List any kind of information you do NOT want to route here.

   Part 3

   Briefly list three Distributed Administration tasks, whether the task should be performed locally at the DL site or by the system administrator at a central site only, the intervals at which these tasks should be performed, and any additional or special triggers that should precede a task.

2. Name your local computer and activate Distributed Administration.

   1. Access the SCOPTS form as the Security Officer.

   2. Enter the NODE ID.

   3. Click the Active selection box.

   4. Click OK

Review

1. What are Distributed Administration responsibilities of the system administrator?

   Implementation, configuration, and troubleshooting tasks, including initial setup, general maintenance, performance monitoring, and system updating.

2. Who 'owns' the data?

   The source DL owns all of the data additions and changes made at its location. Thus, each DL may own different data.

3. Why are naming conventions important when using Distributed Administration?

   System maintenance. Adding or deleting a location on your network is easy, so long as your naming conventions are meaningful.

4. How can you ensure Distributed Administration data security?

   Use Distributed Administration security in addition to Solutions Series security developed for your location.

5. What form is used to name your local (source) DL node?

   System Options form (SCOPTS).

Configuring a Distributed Location

Practice

1. Authorize a target DL.

   1. Access the DSNODE form.

   2. Enter the target DL's node ID.

   3. Select the target node's machine platform.

   4. Enter the shared password between your source DL and this target DL.

2. Identify the types of data that may be distributed to the target DL.

   1. Access the DSRULE form.

   2. Enter the target DL's node ID.

   3. Enter the Control 1-2 whose data you will share with this target DL.

   4. Enter a date.

3. Establish distribution rules for that DL.

   1. Access the DSRF02 form.

   2. Enter the target DL's node ID.

   3. Enter the Control 1-2 whose data you will share with this target DL.

   4. Select any exclusions (or the 'No Exclusions' option).

   5. Enter three digits in the Sequence number field.

4. Delete the distribution configuration for the target you just configured.

   1. Access the DSRF02 form.

   2. Select Actions > Delete this Entry.

   3. Access the DSRULE form.

   4. Select Actions > Delete this Entry.

   5. Access the DSNODE form.

   6. Select Actions > Delete this Entry.

Review

1. What are distribution rules?

Distribution rules allow the source DL to limit access to specific information by another location

2. What forms are accessed when configuring distribution rules for a target DL node?

   Distributed Location Node Control Table (DSNODE)

   Machine Parameters Table (DSMACH)

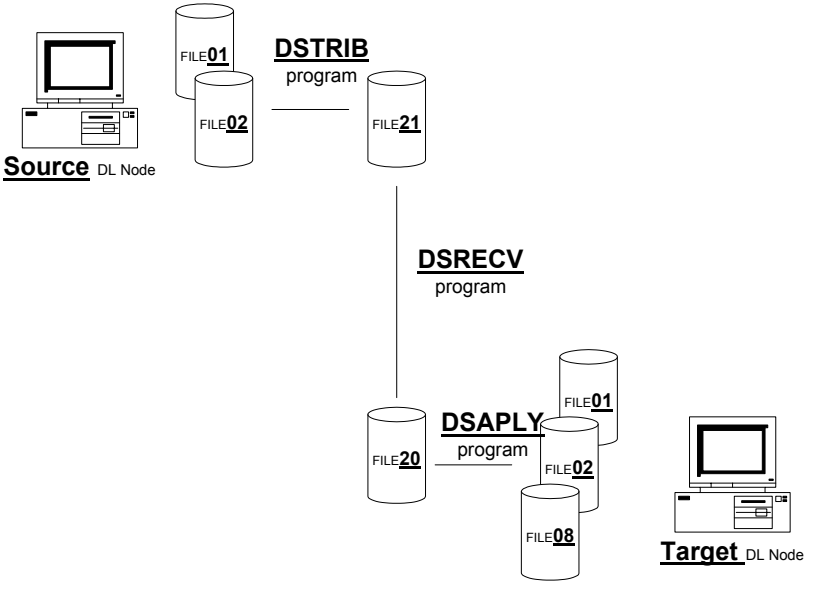
   Distribution Access Log Table (DSRULE)

   Distribution Rules Table (DSRF02)

Performing Distributed Administration Operations

Practice

1. The diagram below illustrates Distributed Administration. Complete the blanks in the diagram with the type of DL, files involved in the operation, and programs used to perform the Distributed Administration operation.



2. Note the pages where the control record examples are located for the following Distributed Administration operations:

   DSRECV *(see "Obtaining the data updates your target DL is authorized to obtain" on page 66)*

   DSPACK *(see "Logging revisions and applying new data resulting from the payroll process" on page 71)*

   DSAPLY *(see "Applying new, changed, and deleted data locally" on page 67)*

   DSTRIB *(see "Sending new, changed, and deleted data to a Replication Packet File (FILE21)" on page 65)*

3. Write the control record required to replicate and distribute data updates resulting from a recent pay run. Accept all defaults, but do not write Payment History records to the output file.

```
          1    1    2    2    3    3    4    4    5     8
0....5....0....5....0....5....0....5....0....5....0....5....0 ... 0
 DSPACKN    N
```

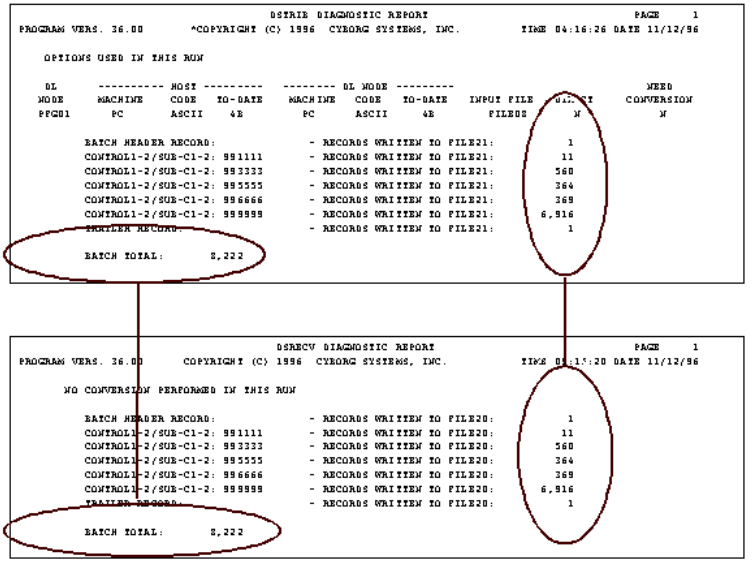
4. Perform an online purge of the Replication Holding File.

   1. Access the DSCL08 form.

   2. Click Perform Purge.

   3. Click OK.

5. The reports that follow illustrate both ends of a distribution. The DISTRIB report is generated at the source DL and the DSRECV report is generated at the target DL. Circle the areas on the following reports where you can look to find problems.



```
                                    DSTRIB DIAGNOSTIC REPORT                                    PAGE     1
PROGRAM VERS. 36.00        ^COPYRIGHT (C) 1996  CYBORG SYSTEMS, INC.          TIME 04:16:26 DATE 11/12/96

    OPTIONS USED IN THIS RUN

     DL       ---------- HOST ---------   -------- DL MODE ---------                                  NEED
   MODE      MACHINE     CODE    TO-DATE    MACHINE    CODE    TO-DATE    INPUT FILE    OUTPUT      CONVERSION
   PPGD1       PC        ASCII     4E         PC       ASCII     4E         FILE08       FILE        N
                                                                                          N

          BATCH HEADER RECORD:              - RECORDS WRITTEN TO FILE21:          1
          CONTROL1-2/SUB-C1-2: 991111       - RECORDS WRITTEN TO FILE21:         11
          CONTROL1-2/SUB-C1-2: 993333       - RECORDS WRITTEN TO FILE21:        560
          CONTROL1-2/SUB-C1-2: 995555       - RECORDS WRITTEN TO FILE21:        364
          CONTROL1-2/SUB-C1-2: 996666       - RECORDS WRITTEN TO FILE21:        369
          CONTROL1-2/SUB-C1-2: 999999       - RECORDS WRITTEN TO FILE21:      6,916
          TRAILER RECORD:                   - RECORDS WRITTEN TO FILE21:          1

          BATCH TOTAL:        8,222
```

```
                                    DSRECV DIAGNOSTIC REPORT                                    PAGE     1
PROGRAM VERS. 36.00        COPYRIGHT (C) 1996  CYBORG SYSTEMS, INC.          TIME 04:15:20 DATE 11/12/96

       NO CONVERSION PERFORMED IN THIS RUN

          BATCH HEADER RECORD:              - RECORDS WRITTEN TO FILE20:          1
          CONTROL1-2/SUB-C1-2: 991111       - RECORDS WRITTEN TO FILE20:         11
          CONTROL1-2/SUB-C1-2: 993333       - RECORDS WRITTEN TO FILE20:        560
          CONTROL1-2/SUB-C1-2: 995555       - RECORDS WRITTEN TO FILE20:        364
          CONTROL1-2/SUB-C1-2: 996666       - RECORDS WRITTEN TO FILE20:        369
          CONTROL1-2/SUB-C1-2: 999999       - RECORDS WRITTEN TO FILE20:      6,916
          TRAILER RECORD:                   - RECORDS WRITTEN TO FILE20:          1

          BATCH TOTAL:        8,222
```

Review

1. What program is used to recover lost data from a replication holding file (FILE08)?

   DSAPLY with a specified recovery parameter

2. Which program is used to log data revisions and update DLs (local and remote) during the payroll process?

   DSPACK

3. What is the difference between a recovery operation and a distribution operation?

   A distribution operation uses FILE20 as input and a recovery operation uses FILE08 as input.

4. What is a collision error? What can you do about it?

   If a collision error occurs, the data distributed to update the local computer is no different than what is already there. Review the DSAPLY Diagnostic report, locate errors, determine what is correct, then revise the records at both ends of the distribution (source and target).

APPENDIX D

Messages and Troubleshooting

In This Appendix

Introduction

This section provides information on error messages that might occur while running particular programs, and possible fixes.

Selected FILE08 Display (DS8SEL)

The following message might occur while running this program:

Message	Meaning/Solution
File08 Selection Display Is Completed	All records have been displayed as per the selection parameters entered on the DS8SEL form.

Distributed Location NODE Control Table (DSNODE)

The following messages might occur while running this program:

Message	Meaning/Solution
DS-NODE-ID must be entered	A Node-ID is missing, and must be entered.
Machine Type must be entered	The Machine Type is missing, and must be entered.
Cannot delete TABLE, DSRULE TABLE exists	A 'Z-DELETE' on the DSNODE form is being attempted and a corresponding DSRULE entry still exists for the node being removed. Action: Remove the DSRULE entry(-ies) before removing the DSNODE entry.

Distributed Access Log Table (DSRULE)

The following messages might occur while running this program:

Message	Meaning/Solution
Cannot Delete Table, DSRF02 table Exists	A 'ZDELETE' on the DSRULE form is being attempted while a corresponding DSRF02 entry still exists for the node being removed. Action: Remove the DSRF02 entry (-ies) before removing the DSRF02 entry.
DSR-CONTROL-1-2 Not Found	The Control 1-2 entry on the DSRULE form is equal to SPACES or a non-existent Control 1-2. Action: Enter a Valid Control 1-2.
DSR-SUB-CNTRL-1-2 must be SPACES	The Sub Control 1-2 value must be SPACES.
DSR-DATE must be entered	The DSR-DATE on the DSRULE form must have a valid date. Action: Enter a valid date for the DSR-DATE.
DSR-REC-KEY must be SPACES	During the addition of a DSRULE entry, the DSR-REC-KEY field must be SPACES.
DSR-SEQ-NBR must be SPACES	During the addition of a DSRULE entry, the DSR-SEQ-NBR field must be SPACES.
DSR-NODE-ID not found	The Node-ID specified on the DSRULE form does not have a corresponding DSNODE entry. Action: Verify the Node-ID entered and adjust the DSNODE form if necessary.

Distribution Rules Table (DSRF02)

The following messages might occur while running this program:

Message	Meaning/Solution
DSF2F-SUB-CNTRL-1-2 must be SPACES	The Sub Control 1-2 value on the DSRF02 form must be SPACES.
DSF2-DSTRIB-RULE must be entered	A Distribution rule must be entered or selected when updating the DSRF02 form.
DS-NODE-ID not found	The Node ID specified on the DSRF02 form does not have a corresponding DSNODE entry. Action: Verify Node ID entered and adjust the form if necessary.
DSF2-CONTROL-1-2 not valid for NODE	The Control 1-2 entered on the DSRF02 form does not have a corresponding entry on the DSRULE form. Action: Verify Node ID and Control 1-2 values on the DSRF02 form and adjust the DSRULE form if necessary.

Replication Management (DSCL08)

The following messages might occur while running this program:

Message	Meaning/Solution
Distrbution Solution is not active	Check the SCOPTS form and ensure that the Distributed Administration is checked as Active.
No Distribution has occurred	No DSRULE records are found on FILE01. Therefore, no deletion of FILE01 records will occur.

Replication Application (DSAPLY)

The following messages might occur while running this program:

Message	Meaning/Solution
Unexpected record encountered	The first record processed on FILE20 was not an F record (Batch Header). Action: Check the results of the DSRECV batch process which proceeded the execution of DSAPLY.
File has not been processed through DSRECV	Conversion switch on the F record is not equal to 'N'. This indicates that DSRECV was not executed. Action: Check to ensure that a prior DSRECV process has been run.
ADD Failed—Segment:____ Key:____. Segment already exists.	An attempt to add a new segment has occurred, but the segment already exists on FILE02. Action: Check the contents of the segment on the target enhancement and determine whether the update is required. If necessary, make the update on the target environment.
DELETE Failed for Segment:____ Key:____ Segment not found	An attempt to delete an existing segment has occurred, but the segment does not exist in the target environment.
Change failed for Segment:____ Key:____. Segment not found	An attempt to change an existing segment has occurred, but the segment does not exist in the target environment. Action: Add the segment to the new environment, but make sure the Distributed Administration is turned off during the addition of this segment, otherwise an add transaction will be sent back to the host site and cause a collision error.
FILE 02 Table Not Found for: Table:____	A segment being added, changed, or deleted was not found on the ZXCYB88T records. Action: Run F-XEF to rebuild the ZXCYB88T records. Also, make sure the data being added has field definitions set up to define the data being applied to the target environment.
Employee area full for Employee ____ in Organization ____	Action: Examine current Area 2 expansion values and expand this area in order for this employees activity to be applied to the target environment.
FILE 02 update failed for: ____ Activity Type:____	The DSAPLY program encountered a problem with performing the activity noted in the message. Research and reapply this data if necessary.
ADD operation failed for: ____ record already exists	An attempt is being made to add a new employee, company, and/or tax record, but the record already exists.
Change operation filed for: ____ record not found	An attempt is being made to change an existing employee, company, and/or tax record, but the record is not found on FILE02.

Message	Meaning/Solution
File update failed for: ____	A problem exists with FILE01 option lists and/or table maintenance. Verify that if the activity is an add transaction, the record does not already exist. If the activity represents a change or a delete, the record being applied must be present on the file.
Record count sent/processed does not match	The record count on the Z record on FILE20 does not match the number of records processed by DSAPLY. Action: Verify that the FILE20 has not been damaged or compromised.
DSAPLY encountered collision errors	This message indicates that there are collision errors included in this execution of DSAPLY.

Packetizer (DSPACK)

The following messages might occur while running this program:

Message	Meaning/Solution
Invalid control record	Examine the P05RDR control record and compare to the explanations of the DSPACK control record in ***Performing Distributed Administration Operations*** (on page 55).
Invalid record type	The P20 record being processed has an invalid record type. The valid record types are D, W, H, and M. Action: Investigate the employee being reported next to the error message and correct the record on FILE02.
Invalid segment type	The P20 record being processed has an invalid segment code. Action: Investigate the employee being reported next to the error message and correct the record on FILE02.
Unidentified segment code	The DSPACK program has determined that a segment on the P20 record cannot be found on the ZXCYB88T records. Action: Investigate the employee being reported next to the error message. Record the segment information and correct the record on FILE 02.
Premature end of file	The P20 file being processed does not have an end of file record. Action: Ensure that the proper P20 file is being utilized. Also, check to ensure that the PAYXTR, PAYRUN, and MNTRUN processes were successfully completed.
Is Out of Sequence	Missing records are present on the P20 file being processed. Action: Ensure that the proper P20 file is being utilized. Also, check to ensure that the PAYXTR, PAYRUN, and MNTRUN processes were successfully completed.
Record is Too Big	The record on the P20 file exceeds 64K. Action: If the record size is correct, then the DSPACK program must be changed to accommodate this large record.
Error Opening Files	The FILE04 being accessed cannot be found. Please check the script to ensure that the proper file is being accessed.

Replication Distribution (DSTRIB)

The following messages might occur while running this program:

Message	Meaning/Solution
Invalid Run Option Found	The FILE04 parameter card has an invalid entry. Action: Refer to ***Performing Distributed Administration Operations*** (on page 55) for the proper options to use.
No AA Computer Record Found	In order to run DSTRIB, FILE01 must have an AA record which identifies the type of environment DSTRIB is being executed on.
Error reading UDS1 table	The DSTRIB program could not find a DSNODE (UDS1) record for the Target Node being processed. Action: Check the DSNODE form to ensure an entry exists for the target node designated in the FILE 04 parameter card.
Incorrect batch password	The DSTRIB program has found that the password on the FILE04 parameter card does not match the password on the DSNODE table record for the target node. Action: Check the DSNODE form for the password of the target node and compare to the FILE 04 parameter card designation.
Error reading UDS2 table	The DSTRIB program could not find a machine table record for the Machine ID designated in the 'AbA Computer' record. Action: Check the designation in the 'AbA record' in the FILE01 and match against the current UDS2 records on FILE01.
Error reading UDS3 table	The DSTRIB program could not find a DSRULE (UDS3) record for the target node specified. Action: Check the DSRULE form to ensure at least one entry exists for the target node designated in the FILE04 parameter card.
Error reading RFT table	The DSTRIB program could not find any RFT records. Action: Run F-XREF to create RFT records.
ETL Table Overflow: ____	The number of ETL records exceeded 700. Action: Expand the ETL table in the DSTRIB program.
Error Reading ETL Table	The DSTRIB program could not find any ETL record. Action: Check FILE01 via DSP01 for ETL records. If they are not present, restore FILE01.

Message	Meaning/Solution
No Extract Record Found	The DSTRIB program found that there were no FILE08 records for the target node. No data was extracted for this execution of DSTRIB. Action: Check to make sure the desired target node is specified in the DSTRIB control card properly, saying '1st Record Not Batch Header'. The DSTRIB program is utilizing FILE20 as input and has found that the first record on that FILE20 is not an F record. Action: Check to ensure that the proper FILE20 is being used.
2nd Record Not Packet Header	The DSTRIB program is using FILE20 as input. The second record FILE20 should be a Header Record (H), but it is not. Action: Check to ensure the proper FILE20 is being utilized.
Record Length Greater than 846	The DSTRIB program is attempting to write a FILE21 record greater than 846 characters in length. Action: Check the record displayed with this error message and verify the type of record being Distributed.
Error Opening File	The DSTRIB program cannot successfully open FILE01 and/or FILE08. Action: Check the script to ensure the correct FILE01 and/or FILE08 is being utilized.
Non-Numeric Record Length	The segment length on the FILE08/FILE20 record is not numeric. Action: Remove erroneous records from FILE08/FILE20 and rerun DSTRIB.
Invalid Record Type	The DSTRIB is using FILE20 as input and the record is being processed in the first position is not equal to A, C, D, F, H, or Z. Action: Remove the record being displayed with this error and rerun the DSTRIB program.
Error Searching RFT-TBL	The DSTRIB program could not find the RFT record for the detail record being processed.
Non-numeric Type 1 Value	The DSTRB program has found a numeric field and spaces. Action: Examine the record that is displayed with this error and verify all the numeric fields on this record. Correct the problem data on the host environment and rerun DSTRIB.
Unknown Char in Byte 35	The DSTRIB program has found an invalid sign byte on a numeric field. Action: Examine the record that is displayed with this error and verify the structure of this signed numeric field. Correct the problem data on the host environment and rerun DSTRIB.
Error Searching ETL-TBL	The DSTRIB program could not find the ETL record for the detail record being processed.Error recounting UDS3 TBL

Message	Meaning/Solution
Error recounting UDS3 TBL	The DSTRIB program was unable to update the target node's DSRULE records. Action: Check to ensure that DSRULE table records are present for the target node's Control 1-2 being processed.

Replication Reception (DSRECV)

The following messages might occur while running this program:

Message	Meaning/Solution
Invalid Run Option Found	The FILE04 parameter card has an invalid entry. Action: Refer to ***Performing Distributed Administration Operations*** (on page 55) for the proper options to be used.
1st Record not Batch Header	The DSRECV program is utilizing FILE21 as input and has found that the first record on that file is not an F record. Action: Check to ensure that the proper FILE21 is being utilized and that there were no file transfer issues in regards to the movement of this file from the host environment to the local target environment.
2nd Record not Packet Header	The DSRECV program is using FILE21 as input. The second record on FILE21 should be a header record (H) but it is not. Action: Check to ensure that the proper FILE21 is being utilized and that there were no file transfer issues in regards to the movement of this file from the host environment to the local target environment.
Error Reading RFT Table	The DSRECV program could not find any RFT records. Action: Run F-XREF to create RFT records.
Error Reading ETL Table	The DSRECV program could not find any ETL records. Action: Check FILE01 via DSP01 for ETL records. If they are not present, restore FILE01.
Error Reading Next Record	The DSRECV program has attempted to read a record on FILE21, but was unsuccessful. Action: Check to ensure that there were no file transfer issues in regards to the movement of this file from the host environment to the local environment (target).
Error Opening File	The DSRECV program can not successfully open FILE01. Action: Check the script to ensure that the correct FILE01 is being utilized.
Non-Numeric Record Lengths	The segment length on the FILE21 record is not numeric. Action: Remove the erroneous record being displayed with this error message from FILE21.
Invalid Record Type	The DSRECV program is using FILE21 as input and the record being processed in the first position is not equal to A, C, D, F, H, or Z. Action: Remove the record being displayed with this error and rerun the DSRECV process.
Error Searching RPT-TBL	The DSRECV program could not find the RFT record corresponding to the detail record being processed by DSRECV.

Message	Meaning/Solution
Unknown Char in Byte 35	The DSRECV program has found an invalid sign byte on a numeric field. Action: Examine the record that is displayed with this error and verify the structure of this signed numeric field. Correct the problem data on the host environment and rerun DSTRIB and DSRECV.
Non-Numeric Value in Type 1	The DSRECV program has found a numeric field that contains a combination of numeric data and spaces. Action: Examine the record that is displayed with this error and verify all the numeric fields. Correct the problem data on the host environment, then rerun the DSTRIB and DSRECV.
Error Searching ETL-TBL	The DSRECV program could not find the ETL record for the FILE21 detail record being processed.
RFT Table Overflow ____	The number of RFT records exceeded 2400. Action: Expand the RFT Table in the DSRECV program.
ETL-Table Overflow ____	The number of ETL records exceeded 700. Action: Expand the ETL-TBL in the DSRECV program.
Non-Numeric Value in Comp	The DSRECV program has detected a new numeric character in the middle of a computational field. Action: Examine the record displayed with this error message and correct the data in the host environment. Rerun DSTRIB and DSRECV for the target node.
Incorrect Segment Length	The DSRECV program has determined that the segment length in the FILE21 record is incorrect. Action: Examine the record displayed with this error message and verify the segment length.

Glossary of Terms

.EXE
A binary file containing a program in machine language that is ready to be executed.

.INI
A file that contains the parameters (values) used by the .exe file (program).

360-degree appraisal
Appraisals that include evaluations from an employee's managers and supervisors, peers, subordinates, and even customers, clients, and suppliers.

Absence data
Employee-level absence information that is entered on the absences forms.

Absence point
User-defined number that may be assigned for a particular absence and that can be totaled over time to determine if an employee is within the accepted number of absences for a time period.

Absence type
A classification of an employee absence, such as 'jury duty' or 'sick'. Employee absences are recorded by date and absence type.

Account timeout
The period of time that elapses before a user's account becomes invalid because of inactivity.

Accumulator id
A three-position, alphanumeric identifier for a benefits accumulator.

Acrobat
A suite of programs developed by Adobe Systems, Inc. For creating and distributing electronic documents. Programs in the suite allow you to create a portable document format (PDF) file for a document. You can then distribute the PDF file electronically to people who view the document with their freely distributed acrobat reader. People viewing a PDF file (or document) with the Acrobat Reader see the document with the exact layout intended by the author.

Action button
An action button performs an action such as saving the information you entered or telling the system you finished reviewing a page. An action button consists of an icon (or button) accompanied by underlined text (link text). For example, at various places throughout eCyborg Interactive Workforce you may see an action button displaying a check mark accompanied by the underlined text 'save changes'. You can click either the text or the button to save your changes to the page.

Activity code
Describes the clock transaction (ring) activity, such as clock start or meal end.

Activity types
With the time and attendance solution, you can set up the system so that an employee or group of employees may clock in and out for up to eight different activities: clock-in (1), break 1 start (2), break 1 end (3), meal start (4), meal end (5), break 2 start (6), break 2 end (7), and clock end (8).

Actuarial valuation
An examination of a pension plan to determine if contributions are being accumulated at a rate sufficient to pay the promised pensions.

Administration home page
The administration page that displays when a user logs on using his or her administrator user ID and password. The administration page displays links to individual administrator pages (eCyborg Interactive Workforce, Human Resources Administration, Benefits Administration, and Payroll Administration).

Administrative User ID
User ID created by an administrator with the role of eCyborg Interactive Workforce administrator. This ID

differs from the employee user ID generated for the administrator.

Aggregate tax method

Method of calculating taxes in which year-to-date income is used to project annual wages (using prorating), on which taxes are calculated. With this method, the amount of tax withheld can vary from pay period to pay period. This method is useful in preventing a salesperson from being over withheld as the result of fluctuations in commission over various pay periods. It is activated on the payroll solution by selecting aggregate/cumula tax (9) from the Withholding Method (PR09) option list on the Employee Tax Record Maintenance form. It is also referred to as cumulative tax calculation method.

Annualization

Process of calculating the annual amount of pay based on the number of pay periods and pay period amounts. Calculated by multiplying the number of pay periods in the year by the current taxable wages in the pay period.

Annualization factor

The factor that is used to multiply current pay period wages to determine annual wages. For example, a monthly pay frequency has an annualization factor of 12. The Payroll Solution typically calculates income taxes on the basis of annual wages. The annualization factor is entered by selecting an option from the Annualization (PP33) option list on the Company Pay Frequencies form for each pay frequency.

Annuitant

Someone entitled to receive or currently receiving payments from an annuity.

Annuity

A contract providing an income for a specific period of time.

Applicant

A person who is applying for a job or position in your organization. Internal applicants come from within your organization while external applicants come from outside of your organization.

Appraisal rating

A method of ranking the performance of an employee during a given period using options ranging from 1-outstanding to 5-unsatisfactory.

ASCII

American **S**tandard **C**ode for **I**nformation **I**nterchange. The basis of character sets used in almost all present-day computers; US-ASCII uses only seven bits to convey some control codes, space, numbers, most basic punctuation, and unaccented letters a-z and A-Z.

Ask Me wizard

A natural language, full-text search facility within the online help. This allows users to type in a question, the wizard interprets the question, and displays related topics.

As-of reporting

Ability to report on data for a specified date or date range.

Audit record

A snapshot of information entered on a form. Audit records are stored on the employee database and are displayed on audit reports in an is/was reporting format. Adjustments and time entries are stored as audit records and are extracted for a payroll run in which they update the employee's record.

Audit report

A report that is available after the running of a program; it lists created records as well as error messages for records that could not be created.

Audit trail

A report of changes made to your employee database, such as the Payroll Audit Trail (0101) report.

Authorized absence

Absences that are generally considered as paid time away from regularly scheduled work.

Automatic plan

A plan that has been defined with a default option and default pre- or posttax indicator (also known as core/default plan).

Average deferral percentage
Percentage used in nondiscrimination and compliance testing mandated by US law. The calculation is defined as the contribution divided by the compensation.

Average rating
A rating used for performance appraisal systems with categories weighted by relative importance, where the average score reflects the weighted scores.

Back
Takes the user back to the previous page.

Badge
Time and Attendance Administration can be set up to use two different types of badge readers. The type of badge your organization uses, is determined by your third party badge reader software. The two types of badges are magnetic badges and bar code badges.

Badge error
Occurs when a badge is used to create a clock transaction (ring) and an employee has not been assigned to the badge.

Badge number
Up to ten-character ID stored on employee badges and clock transactions (rings) that tie clock transactions (rings) to an employee on the ***Employee Database*** (on page 132).

Banner
Banner forms separate groupings on forms produced from the Federal, State/Local, and Employee Queues.

Batch
A group of transactions submitted to the batch payroll processing system. Also, a collection of time entries that corresponds to an employee group, such as department.

Batch control record
Precedes all transactions separated by group; used to identify the company to which the transactions in that group apply. By entering anticipated totals for dollars and hours on the batch control record, you may verify your totals against those accumulated by the system.

Batch layout facility
A program that produces a segment layout for loading forms via batch. This was formerly known as BATCHL.

Batch number
An alphanumeric field on the batch control record containing a user-defined value used to identify a unique group of time entries or transactions.

Batch processing
A processing method that runs in the background and requires limited intervention.

Benchmark job
A standard or point of reference for determining total job points.

Beneficiary
A person named by the participant in an insurance or pension plan to receive any benefit provided by the plan if the participant dies.

Benefits control number
A four-position, alphanumeric identifier that specifies which tables are accessed for an organization.

Benefits statement
Report that indicates the coverage and cost of each benefits plan in which an employee participates.

Big option list
A large option list that includes a search facility. This was formerly known as a big codeset.

Bridge loan
A loan made to assist a relocated employee in purchasing a new residence before the sale of their old residence is complete.

Browser
Software application used to locate and display web pages. Modern browsers give users access to graphics, text, and multimedia information, including sound and video.

Budget plan year
A twelve-month period over which a salary budget is effective.

Budget scenario
The result of creating one or more salary plans in order to see the effect of different increase policies on the budget.

Budget setting
The process of analyzing and selecting an organization's salary budget for the coming plan year.

Cafeteria plan
A specific type of flexible benefit plan that allows employees to select their benefits from a number of benefit plans. This term may be used interchangeably with flexible benefits plan.

Calculation option list
An option list that contains calculation formula. This was formerly known as a calculation codeset.

Candidate
A person who is applying for a job or position in your organization and is under consideration.

Career planning
Providing career incentives such as advancement and additional education and training for individual employees in order to meet projected organizational needs.

Carrier record
A carrier record supplies information from one application area to another application.

Case-sensitive
A program that distinguishes between uppercase (capital) and lowercase (small) letters. A case-sensitive program that expects you to enter all commands in uppercase will not respond correctly if you enter one or more characters in lowercase.

Catalog
A file (with the extension of .cat) that contains all the information necessary for Impromptu to access and retrieve information from a relational database. The catalog provides a business view of the data, as well as information about what database to access, where the database is stored, and how the tables in the catalog are joined in the datamart.

Category code
General term used to refer to the option selected from category (PP01 and PP02) option lists on the company earnings and company deductions forms. It is used to indicate the type of earning or deduction.

CE/H
Abbreviation for considered earnings/hours.

Change control facility
A facility for updating and comparing your system control repository. This was formerly known as MAINTI/MAINTO.

Check box
A standard windows control that displays a yes/no setting, either checked (yes) or unchecked (no).

Check digit
Unique identifier that is generated by the TBLCHK program and used by the system to check the table relationship records.

Checklist
A list of tasks to be performed in sequence. The checklist displays within the navigator area. Checklists link tasks and other checklists together to perform work flow functions. Users can display a checklist by selecting a checklist icon within the tasks in the navigator.

eCyborg Interactive Workforce specific—a list of tasks/pages generally displayed in a chart with hot spots (links) for the checklist items. The user clicks the link to access the page.

Checklist item
An item appearing within the navigator when a checklist is being displayed. Checklist items include tasks, dialogs and even other checklists.

Checklist item status
Defines the status of a checklist item. These can be:

- Available to perform
- Required
- Not available
- Already completed

Checklist margin
The area of the navigator that displays the checklist item status when a checklist is being displayed.

Checkmark
If in the done column of a eCyborg Interactive Workforce checklist, indicates that an item on a checklist is complete. Can also indicate OK, finished, submit, and so forth.

Class
A class is an occurrence of a course that is specific to a location and a date, that is being administered using Training Administration. For example, 'eCyborg: Using the Web Client′ on Thursday, December 21, in Chicago is a class of the course 'eCyborg: Using the Web Client'.

Class evaluation results
These are the results as entered on the evaluation forms filled out by the class participants upon completion of the class. These results are recorded on the class evaluation results form.

Client data file
File containing information replicated from the System Control Repository. Used by client workstations to improve response time, since editing can be performed locally. May be located on each client workstation or may be located on a server and be shared by multiple client workstations on the network. Formerly known as the Client Control File.

Clock in and out
Also referred to as swipe/swiping the clock. When an employee uses their badge to record an activity time, they must pass their badge through the badge reader. This action can be referred to as clocking in and out.

Clock transaction
Record containing the information needed to create time entries for payroll processing. Clock transaction (ring) information includes date, time, and badge number. A clock transaction (ring) is created when a badge is swiped through a clock.

Clock transaction warning
Occurs when a clock transaction (ring) time falls outside of an employee's schedule warning times.

Closing costs
The costs associated with the purchase of a new house.

CLP
Abbreviation for certificates, licenses, and permits.

Codeset
A list of valid code values and associated descriptions from which you may select an appropriate entry. This is now known as an option list.

Coefficient
Customer-defined value used in the formula to calculate a new salary grade midpoint value.

Combined register (2222) report
A report that provides a detailed printout of all earnings, hours, taxes, and deductions for all the payments and adjustments made on a payroll run. It is Report Generator 2222.

Command button
A standard windows control that initiates a command of sets an option (previously known as push button).

Common tax organization
A method of setting up taxation in an organization in which all necessary tax specification records are contained in a single organization. The common tax organization often handles tax specification records more efficiently, since it avoids duplication of the federal tax records and of any state or local records used by multiple companies.

Communication event
A letter or email that can be triggered automatically or manually within the system. Communication events are set up by the system administrator and usually include data from a form or record.

Compa ratio
The ratio of a given salary compared with the midpoint of the salary range. The formula is the salary divided by the midpoint.

Competency
A requisite capacity to perform a single or set of skills or activities.

Complement limit
A 'complement limit' is the maximum number of complement units that can be assigned to a position at any one time.

Complement position
A 'complement position' is a position that is included in complement control.

Complement unit
A 'complement unit' is the type of unit used to measure the value of a position, for example, headcount, fte or hours.

Compliance
Conformity in fulfilling legal requirements.

Component
The first level of functional organization on the navigator or menu, such as employee resourcing or employee development.

Component icon
An icon that denotes the current component. There are a number of components within the system. Each component appears as an icon on the navigator.

Component plan
Any plan included under the flex master plan or grouped together under a group master.

Condition
Predefined criteria that can be added to a report's filter.

Considered earnings
An employee's paid earnings that are to be accumulated, based on plan rules, for use in determining credited service or calculations of final benefits amounts.

Considered earnings/hours (CE/H) accumulators
Used only in benefits plans to accumulate the earnings and hours an employee has acquired toward eligibility for a deferred plan. Accumulators may be retained on a monthly, quarterly, or annual basis.

Considered hours paid
Actual number of hours for which an employee was paid and that are to be accumulated based on plan rules.

Considered hours worked
Actual number of hours an employee worked. These hours are to be accumulated based on plan rules for use in determining credited service for a plan participant (or for a non-participant if eligibility has been met).

Consolidated reporting
Option that enables packaged reports to be processed for all organizations (consolidated).

Customer-defined value used in the formula to calculate a new salary grade midpoint value.

Context-sensitive help
Information about an object and its current condition. It answers the question 'what is this?'

Contribution type
The type of contribution being made to a benefits plan. The system allows for the deduction and accumulation of up to five different contributions per plan: basic employee pretax, basic employee posttax, supplemental employee pretax, supplemental post-tax, and organization.

Control 1-2
A company or group of employees (now known as an organization).

Control levels
A hierarchy of values used to determine the breakdown of an organization for reporting purposes. The values are user-defined.

Control number
An alphanumeric designation assigned to a table to define the table records that will be used for each organization.

Conversion
A method for transferring data from either a manual or automated system into the system.

Co-ordinator
A coordinator is an instructional institution, organization or person who administers training courses.

Core plan
One of the plans that make up the minimum benefits in which all eligible employees are required to enroll—for

example, medical and life. Employees who fail to return enrollment forms with their benefit choices may be automatically enrolled in the core plans (also known as default plans).

Cost categories
Cost categories are classifications or divisions used to separate costs for training into broad groupings, for example, equipment or operating costs.

Cost types
Cost types are used to further define training costs. For example, the category of equipment could be further broken down into the cost type of overhead projector and monitor rental.

Costing
Projecting the future cost of a benefits plan contribution for budget purposes.

Course
A course is a separate unit of instruction in a subject being administered using the training administration solution. For example, 'eCyborg: Using the Web Client′ is a course. This may be applied to a training course provided internally or externally.

Course directory
A course directory is a list of all available courses.

CPI
Characters **p**er **i**nch

Credited service
The number of years of employment for which an employee is given credit for use in determining final benefits amounts.

Crew
A group of employees who rotate from one schedule assignment (shift) to another, following a rotation pattern.

Crew code
A unique, one-character, alphanumeric identifier of a crew.

Cross-reference keys
Provide direct query access to data within the system database.

CSL
Abbreviation for ***Cyborg Scripting Language*** (on page 129).

Cumulative data
Also called 'to-date data'. includes payroll earning, deduction, net pay, taxable wage, and tax to-date figures for employees.

Cursor
A special symbol, usually a solid rectangle or a blinking underline character, that signifies where the next character will be displayed on the screen. To type in different areas of the screen, you need to move the cursor. You can use the arrow keys or a mouse to move the cursor.

Customer-defined
Values that depend on an organization-specific definition--for example, option list.

CYB88X
An English Language root program used to set the production version switch to on or off, in addition to other automatic settings.

Cyborg Scripting Language
Cyborg's fourth-generation programming language, previously called English Language.

Data extract
Method for extracting information from The Solution Series for the purpose of subsequently loading it into eCyborg Interactive Workforce databases.

Data load
The process of moving data from one system or media to another. It encompasses data mapping, data extraction and conversion, and the actual loading of the data. Also the method of loading data extracted from The Solution Series into eCyborg Interactive Workforce databases using programming scripts.

Data mapping
The process of identifying, comparing, and matching data (field to field) to be converted from one system or media to another.

Database
A collection of information organized so that a computer program can quickly search for and select

specific pieces of data. Think of a database as an electronic filing system.

Datamart
Relational tables with a defined structure that have been designed to automatically accept full datamart extract data seamlessly.

Deduct credits by plan
A method of distributing flexible benefit credits. The total monetary value for credits is prorated based on the employee's pay frequency. Credits are given to employees as earnings added to their pay; the cost of individual employee plans are collected through payroll deductions and listed on the employee's payment stub.

Deduct credits by plan method
A method of distributing flexible benefit credits. Credits are given to employees as earnings added to their pay; the individual employee plan costs are then collected through payroll deductions.

Deduction
An amount subtracted from available net pay. Deductions can be involuntary (child support or maintenance) or voluntary (pension plans).

Deduction cycle
A predetermined schedule for taking voluntary deductions, based on the defined frequency.

De-enrollment
The process of shutting off plan benefits for an employee for reasons other than a separation activity.

Deferred compensation
Any benefit that is not immediately payable to an employee, but is instead deferred to a later date. This term refers to retirement vehicles, including all defined benefit, defined contribution, stock, and thrift/savings plan.

Deferred plan
Any benefits plan in which benefits are not immediately payable to an employee, but are deferred to some later date. This term refers to retirement vehicles, including all defined benefit, defined contribution, stock, and thrift/savings plans.

Delimiter
A character that tells the system where an item of data ends and another starts.

Dependent
An individual who relies or depends on another for his or her support.

Dependent number
A unique number in the eCyborg Interactive Workforce database that identifies an employee's spouse and his or her other dependents.

Detail page
A page in eCyborg Interactive Workforce that displays detailed information. Summary pages contain links to the detail for each record.

Dialog box
A secondary window that appears on the screen to present information or request input. Dialog boxes are generally temporary—they disappear after you enter the requested information.

Disability insurance tax
A tax required by some us states to be funded by employee-paid contributions to pay all or part of the cost of disability insurance coverage. On the Payroll Solution, us state disability insurance tax records are established as Type 4 taxes.

Disciplinary action
Action taken against an employee for violation of an organization policy or procedure.

Discretionary increase
A salary increase amount or percentage determined by a manager according to the guidelines established by the organization.

Display
Make data or images display on a computer monitor.

Display box
An area on a form in which data is displayed (formally known as an inquiry field).

Disposable income
For garnishment purposes in the us, an employee's earnings minus deductions required by state or federal law.

Distributed location
A customer location where data changes are replicated and may be distributed. A DL is identified to the system by a unique 5-position alphanumeric node ID.

Distribution
The process of passing data from a source DL to one or more target DLs.

Distribution rules
A set of parameters that determine how data will be distributed from one DL to another. These are defined at each DL by the owner using the distribution rules screens. Distribution rules are stored in tables that are not replicated (thus, they cannot be distributed).

DL
Abbreviation for ***distributed location*** (on page 131).

Double-click
Click a mouse button twice in rapid succession.

Drop-down list
A drop-down list is a view of the acceptable entry options available for a text box.

Drop-down list box
A standard windows control that displays a current setting but can be opened to display a list of choices. The user selects a choice by double clicking on the choice. The user can type into the field, and the system moves the list of choices to the last letter typed.

Dynamic SQL
Statements created by a program that must be interpreted and converted to executable sql statements at run time.

Earned income credit
A refundable amount that reduces the tax owed by certain low-income individuals in the us who meet adjusted gross income levels.

Earning
Money paid in return for work performed or services rendered. In Payroll Administration, earnings are separated by earning numbers into various categories such as regular pay, overtime pay, shift pay, bonuses, and so forth.

Earnings category
Used to categorize similar earnings. For example, all the overtime earnings can be grouped into category 01, all the shift differentials/premiums into category 06, and so forth.

EBCDIC
Extended **B**inary **C**oded **D**ecimal **I**nterchange **C**ode; binary code for alphabetic and numeric characters developed by IBM for its computers.

eCyborg Interactive Workforce Home
Button on every page that returns the user to the eCyborg Interactive Workforce Home Page.

eCyborg Interactive Workforce Home page
Home page that displays each time employees log on to eCyborg Interactive Workforce after completing the new user tasks on the New User Home page.

Effective date
Date on which an event takes place, for example, an enrollment or benefits plan change.

EIC
Abbrevation for ***earned income credit*** (on page 131).

EL
Abbreviation for English Language, now called CSL (Cyborg Scripting Language).

Electronic Performance Support system
Online tools that help users perform their job quickly and efficiently. EPSS can include online help, computer-based training (CBT), electronic manuals, wizards, and so on.

Email
Literally 'electronic mail'. This is a message that is sent to one or more people within or outside of your organization by an automated email software package.

Employee cancellation
An employee cancellation occurs when an employee is canceled from attending a training class or training program.

Employee Database
The file that contains organization and employee records. This is File02. It was formerly known as the Master File.

Employee Database record
The complete record for an employee. It may be composed of multiple physical records.

English Language
Former name of Cyborg's fourth-generation programming language, now called Cyborg Scripting Language.

Enrollment form
A customer-defined form used by employees to record their benefits elections and any associated dependent and/or beneficiary information.

Entitlement accrual
An accumulation of hours for an employee benefit, such as sick leave or vacation time, commonly known as an accrual.

Entity
Each Organization Unit, Job, Position, and Incumbent is an entity. Together they are entities.

Entry field
An area on a screen or browser page where the user can input information.

Entry form
An entry form is a form used to enter data.

Environment
The host platform and workstations where your Cyborg system resides, and any communication protocols. Also, a work space dedicated to a specific processing type. For example: development, test, and production.

EPSS
Abbreviation for ***Electronic Performance Support system*** (on page 131).

Establishment Reporting
Establishment Reporting occurs when an employer with several business locations chooses to file wage reports, broken down by location or unit, to the Social Security Administration. Each unit is identified by a four-character code, called an Establishment Number. The employer obtains approval from the SSA to use Establishment Reporting. Establishment Reporting does not apply to 1099s.

Event
The combination of a trigger (changes made to system data) and an action (the creation of an email or letter). Events always consist of these two component halves.

Excused absence
Absences from regularly scheduled work that can be considered as either paid or unpaid time off.

Extract file
A data file generated to be used by another system or application.

Federal Insurance Contributions Act
The United States Federal Insurance Contributions Act imposes two taxes on both employers and employees. Tax is withheld from an employee's wages to finance the Old-Age, Survivor's, and Disability Insurance (OASDI) social security program and the Hospital Insurance (HI) medicare program. Employers are then required to match the amounts withheld from employees. On the Payroll Solution, employee information for FICA-OASDI social security tax is entered on tax record 101 and FICA-HI Medicare tax on tax record 103.

FICA
Abbreviation for Federal Insurance Contributions Act.

Field
A data item on the database. This is usually displayed on a form as a text box.

eCyborg Interactive Workforce specific—A space allocated for a particular item of information. A tax form, for example, contains a number of fields: one for your name, one for your Social Security number, one for your income, and so on. Every field has a name (also called a field label).

Filter
Device used by report to select certain rows of information from the database, thus limiting the amount of data from the database to be viewed in the report.

Finished
Users click Finished when they have completed all information on a checklist or other *ESS* page.

Flat rate tax
A US local tax that is calculated as a standard percentage rate and that is calculated in the same way for all employees (that is, factors such as marital status do not enter into the calculation). For many such local taxes, Cyborg does not provide tax specification information on the Tax Authority File. Instead, you need to enter a Tax Specification Record for the tax on a Tax Specification Information form, indicating the tax rate in the Flat Rate text box.

Flex credits
Units granted to an employee in order to purchase benefits under a Flexible Benefits Program.

Flex Master Plan
Defines your Flexible Benefits Program and ties component plans together as a group. Employees are enrolled in the Master Plan and then select the benefit plans in which they wish to participate—for example, medical, dental, and life. Flex master plans are set up in Benefits Administration and used by eCyborg Interactive Benefits to display benefit plans to users for initial and open enrollment.

Flex plan
A benefit plan where, in addition to a core of basic benefits (if applicable), the organization/company allocates to each employee a credit for purchasing additional benefits tailored to their individual needs. Flexible benefit plans may include a flexible spending account.

Flexible Benefits Plan
A specific type of benefit plan that allows employees to select their benefits from a number of benefit plans. This term may be used interchangeably with cafeteria plan.

Flexible Benefits Program
A benefits program in which an organization may allocate to each employee a pool of credits or a monetary amount that is to be used to purchase benefits tailored to individual needs.

Flexible Spending Arrangement
A benefits welfare plan set up as an account in an employee's name that is used to reimburse the employee for certain personal expenses. In the United States, these accounts are provided by employers as a way for employees to pre-fund dependent care, legal services, or medical expenses with pretax currency.

Folder
Logical organization device for the content of a Cognos catalog.

Form
A window of information that appears within The Solution Series, including text boxes and other controls. This was formerly known as a screen.

Form area
An area of the window that contains a form.

Form Builder
A tool provided by Cyborg Systems for use with The Solution Series for designing forms.

Formal education
Education that is obtained from a college or university.

Forward
Displays the next page.

FSA
Abbreviation for Flexible Spending Arrangement.

FTE
Abbreviation for Full Time Equivalent.

FTP
File **T**ransfer **P**rotocol. A means of allowing a user on one computer to transfer files to and from another computer over a network

Full Time Equivalent
The ratio of total working time to the time that represents full time employment for a single employee. For example, an FTE of 0.5 means working half of the time that represents full time employment.

Funeral days
Absences from regularly scheduled work due to a funeral, which at the discretion of the organization, can

be considered as authorized or unauthorized, paid or unpaid time off.

Gap analysis
Comparison of a current state of being with a desired state of being. For example, you could perform a skill or competency gap analysis on individual employees or on the workforce as a whole, comparing the existing state of skills and competencies with the required state or level of skills and competencies.

Garnishment
A legal procedure authorizing a deduction from an employee's earnings to satisfy a legal requirement.

General ledger interface
A file that provides a balanced payroll journal for the period. This file contains journal entries for labor expenses, withheld deductions, income, disability, UI, and other withheld taxes, net pay, and company-paid taxes. The interface may also be produced on paper.

Go to details
Displays a new page with detailed information. Used on summary pages.

Graphical User Interface
The Solution Series provides integrated human resource and payroll functionality via the Microsoft Windows Graphical User Interface. These are the elements that display on your screen.

Grievance
A formal complaint made by an employee against the organization usually because of an unsatisfactory working condition or other work-related dispute.

Gross wages
The total of all earnings paid to an employee.

It is stored in the Total Pay (field 119 of the US Tax Authority File) field of the employee's US FICA tax record 101 (FICA-OASDI). This figure appears on the Combined Register (2222) report as Total Pay. It does not appear on US W-2 forms.

Group box
A standard Windows control that groups a set of controls.

Group plan
Defines any number of benefit plans tied together as a group. Group plans are used to define common eligibility and to cluster plans for reporting purposes.

GUI
Abbreviation for Graphical User Interface.

Handicap
Having a physical or mental disability that substantially limits activities especially in relation to employment or education.

Health and safety profile
Data on the employee record that includes information such as the employee's blood type, language, physician, emergency contacts, and any disabilities.

HED
Acronym for Hours, Earnings, and Deductions. Each earning or deduction must be established in The Solution Series with a unique identifying three-digit code. HEDs are used to record pay, hours worked, and deduction amounts and arrears for each employee.

Help
Hot spot on an eCyborg Interactive Workforce page that displays step-by-step directions for completing the page.

History record
Part of an employee's payment history; a snapshot of a check paid to an employee or an adjustment made to an HED or tax.

Holiday days
The time off that all employees are entitled to based on the decision of the organization or government regulation.

Home page
The main page of a Web site that generally serves as an index or table of contents to other documents stored as pages on the site.

HTML
Abbreviation for **HyperText Markup Language,** the authoring language used to create documents on the World Wide Web. HTML defines the structure and layout of a Web document by using a variety of tags and attributes.

Import facility
A tool delivered with The Solution Series that moves data from an external source to any organization or employee form.

Import record
A line in a spreadsheet or delimited file that contains employee or company data.

Inactive plan
A benefits plan that no longer allows employee enrollment.

Inactive tax record
An employee tax record that is no longer in effect for a given employee. Neither wages nor taxes are accumulated for the particular tax record. However, any wages and/or taxes already accumulated remain until clearing is performed. Such clearing is usually performed in preparing the Employee Database for a new year. The inactive records can be deleted at this time. The process of making a tax inactive is called deactivating.

Incumbent
An incumbent is an employee linked with a specific position. The linking of an employee with a Position is an incumbency. An employee may be linked to more than one position; in other words, an employee with multiple incumbencies. A position to which more than one employee is linked has multiple incumbents.

Information-level security
These records grant access to employee and table data via specific password records.

Initial Administrator
Only user whose user ID and password are created during installation. The initial administrator always has authority to all administrative functions: eCyborg Interactive Workforce, Human Resources Administration, Benefits Administration, and Payroll Administration, and can assign administrative roles to others by creating administrative user IDs and passwords.

Initial passwords
Password generated by eCyborg Interactive Workforce for each user ID extracted from The Solution Series. Users must create a user-defined password when they log on to eCyborg Interactive Workforce for the first time.

InitialAdmin
See Initial Administrator.

Inquiry form
A inquiry form is a form used to view data already entered.

Instructional text
Any paragraph(s) on the page that explain the function of the page or fields to the user.

Internal candidate
An employee of your organization who is applying for another job or position in your organization.

Internet
A global network connecting millions of computers.

Intranet
A network belonging to an organization, usually a corporation accessible only by the organization's members, employees, or others with authorization and used to share information.

Investment funds
Different options or accounts available to employees for allocating their contributions, usually applicable to thrift/savings plans.

IPEDS
Integrated Postsecondary Education Data System.

Job assignment
A job associated with a particular employee.

Job code
A designation for a job assignment.

Job streams
A generic reference, Job Control Language, for your operating system's command language.

Alternately: Jobstreams

Job type
A generic category that further defines a particular job.

Jury duty
This is compulsory service on court appointed juries. Employers are required by law to excuse jury duty

related absences. They are not, however, required by law to pay the employee during this time away from the job.

Label
Text that describes the information the user enters into the field.

Labor record
A record containing the hours, amounts, associated charge-to control levels, and function assigned on the employee's Payroll Home Location/Pay Allocations form.

Leave of absence
Occurs when an employee leaves the organization for a period of time, usually temporary, for personal reasons such as medical leave.

Log off
Logs the user off the system. When referring to the Log Off button, use initial caps.

Logical Employee Model
A collection of default employee information that is used to create a model. Logical Employee Model templates are used when hiring new employees to save time and ensure that critical information is established consistently and correctly. These were formally known as LMODELs.

LPI
Lines **p**er **i**nch

Mailing address
An address, other than your legal residence address, to which you have your mail sent.

Maintenance payroll run
A maintenance payroll run automatically updates organization and employee records, but it does not process time entries or generate payments, pay slips, or deposit advices. It is also used to create payment history records.

Major activity
Event that causes a change in an employee's employment status, such as a new hire, termination, or rehire.

Mandatory field
A field that requires the user to enter information before the user can exit the screen or page.

Map file
Stores the predefined relationships between an import file and a form.

Mass time entry creation
Creating time entries for a group of employees through one program execution, such as for a paid holiday.

Master File (0202) report
A Cyborg report that produces a formatted display of the data in an employee's current batch Employee Database record. This includes the wages and taxes accumulated for the employee, covering current, month-to-date, quarter-to-date, and year-to-date information for individual tax codes. It is report generator 0202.

Matrix ID
Unique identifier for each pay-for-performance matrix.

Menu
A list of choices; the choices are generally links that take the user to another screen or page.

Menu bar item
A menu that appears on the menu bar.

Message area
An area of the window that contains messages or selection lists relevant to the current form. The Message Area can be turned on or off.

Method code
One of many specific routines (usually delivered by Cyborg and identified by a two-character code) used to calculate earnings and deductions.

Midpoint
The middle of the span of currency from the minimum to the maximum of the employee salary grade.

Minimart
Relational tables you create so you can insert data from your Subset data extractions.

Monetary perquisites
A privilege or profit that an employee is entitled to that is incidental to regular wages or salary.

Moving expenses
The expenses incurred by an employee due to moving from one location to another for employment purposes.

Multiple master
A file compression technique that duplicates the current employee Permanent Master Record as many times as there are payments to that employee during one pay period. These multiple masters are detail records reflecting the amounts for the payment being made (current), and the adjusted MTD, QTD, and YTD totals. The system uses multiple master records to create history records showing the current payment figures only.

Navigation bar
In eCyborg Interactive Workforce the Navigation bar shows the name of the page you are using, for example, 'Mailing Address'. The top line of the Navigation bar shows the path you took from the Home page to reach the present page. Links on the Navigation bar let you return to the home page or log off the system.

Navigator
Left pane of the work area which forms the main method of moving through the forms. From the Navigator users select the component, process, and task in which they are interested.

Net credit method
A method allocating flex credits. An employee's cost of benefits is calculated as either a net cash earning or a net deduction from the employee's pay. The net amount is the difference, either plus or minus, between the credits allocated to the employee and the cost of his or her flex benefits choices.

New hire
Process of hiring a new employee for your organization.

New user
A user of eCyborg Interactive Workforce who has not yet completed reviewing and updating their personal information on the New User Home page.

New User Home page
Home page that displays for new users of eCyborg Interactive Workforce until they complete reviewing and updating their personal information.

Node
A Distributed Location.

Node ID
A unique 5-position identifier for a node. The naming convention is defined by the user.

Number registered
This is the number of employees registered for a training class. It is updated and displayed on the Class Schedule form.

Object
Each System Control Repository record type is assigned an object code. A single record type can have several object codes assigned to allow limited display.

Object key
A field that allows you to specify the System Control Repository record group you want to display. The value of this field is dependent on the type of information you want to display.

Obsolete plan
A benefits plan that will no longer be used.

Off cycle
An off-cycle payroll run is an additional payroll for the period just completed. An off-cycle payroll run is commonly used to process nonstandard payments, such as bonuses. It is sometimes referred to as an additional or bonus payroll run.

Online
Turned on and connected, for example, printers are on-line when they are ready to receive data from the computer. Users are considered on-line when they are connected to a computer service through a modem. That is, they are actually on the line.

Open enrollment
A period of time during which employees can enroll in or change their benefit choices for the upcoming year, generally in October or November.

Operator ID
A four-character code that identifies the user to the system.

Option
An item in the option list for a field. This was formerly known as a codeset item.

eCyborg Interactive Benefits and Benefits Administration specific—In Benefits, the plan coverage that an employee selects, such as single or family coverage.

Option button
A standard Windows control that allows you to select from a fixed set of mutually exclusive options (previously known as radio button).

Option list
An option list is a list of options that are available within a Text box. This was formerly known as a Codeset.

eCyborg Interactive Workforce specific—Options available in The Solution Series that the eCyborg Interactive Workforce administrator loads in to eCyborg Interactive Workforce. The options are then available in the drop-down list boxes in eCyborg Interactive Workforce.

Organization
A group of employees who are employed in a common structure, governed by the same set of rules or policies, and eligible for the same earnings and deductions For example, your organization may be structured into parts that represent employee groups such as active, union, retirees, applicants, and so forth.

Formerly known as a company or Control 1-2.

Organization Level 3
A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so forth, as defined by you.

Organization Level 4
A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Organization Level 5
A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Organization Level 6
A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Organization Number
A six-character user-defined code that represents an organization; the highest level of the organizational structure in Payroll Administration.

Formerly known as a Control 1-2.

Organization Unit
An organization unit ('Org Unit') is a grouping of Positions within an organization (for example, Accounts Department).

Organization Validation table
A table that validates that an organization is valid and payments can be made.

Organization-specific tax setup
A method of implementing Tax Specification Records in which each organization involved in tax processing contains all the specification records required to process taxes for its employees, as opposed to a common tax organization.

Override file
A file used to maintain COBOL or Report Generator changes to the system.

Packaged reporting
A processing mode in which a job is scheduled to be run at a certain time.

Paid absence
Employee absence that will be paid by the organization. A time entry will be created for this absence.

Parallel run
The process of executing the same programs simultaneously on two separate systems to obtain the same or similar results.

Parameter form
A form that is displayed when certain programs are called from the Navigator or menus. The form facilitates entering parameters for the program.

Password
A secret series of characters, generally user defined, that enables you to access a computer, a software application, or a file. On multi-user systems, each user must enter his or her password before the computer will respond to commands.

In eCyborg Interactive Workforce, the password ensures that unauthorized users cannot access user-specific information.

Password aging
The period of time that elapses before a user-defined password expires and the user must change his or her password.

Pay allocation
A means of allocating, on a percentage basis, employee labor hours and amounts to multiple sets of control levels 3 through 6 and function to accurately reflect employees whose labor must be charged to more than one area within an organization.

Pay document
A pay slip or deposit advice with its associated pay stub.

Pay frequency
The interval at which a group of employees is paid. Examples are weekly and semimonthly. Also referred to as a payroll period.

Pay schedule
A predetermined schedule for a calendar year, identifying period-end and payment dates for each pay frequency.

Pay stub
A preprinted form, corresponding to a check or deposit advice that lists all earning, gross pay, taxes, deduction, and net pay information for an employee.

Pay-for-performance matrix
Chart representation of the variables that result from the combination of salary increase information, how much to give and when.

Payment history record
A record documenting the detail information for a payment or adjustment. Multiple payment history records may be generated for an employee, reflecting multiple adjustments or payments. These records include all earning, deduction, and tax information included in the payment or adjustment.

Payroll home location
The location where the employee is normally assigned to work and where labor distribution information is charged. An employee's home location comprises specific Payroll Levels and is always assigned Allocation Number 01 on the Payroll Home Location/Pay Allocations form. The Function field may also be used as part of a home location, depending on your specific requirements.

Payroll Level 3
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so forth, as defined by you.

Payroll Level 4
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Payroll Level 5
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Payroll Level 6
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Payroll period
A defined period of time for which an employer pays wages to employees.

Payroll Process Control
A series of forms used during the Payroll Process to determine the type of run (payroll run or maintenance run). Allows you to specify the pay frequencies to be paid and which reports are to be produced.

Payroll run
Updates organization and employee records, processes time entries, calculates employee pay, generates pay documents and payroll reports, including the Combined Register. It also produces a variety of special interface outputs.

PCL
Printer **C**ontrol **L**anguage

PDF
A file format that captures formatting information from a variety of desktop publishing applications, making it possible to have formatted documents appear on the screen and be printed. To view a file in PDF format, you need Adobe Acrobat Reader, a free application distributed by Adobe Systems.

Peer-group appraisal
Appraisal that uses performance evaluations completed by an individual employee's co-workers or project team members.

Pending de-enrollment segment
Plans for which an employee is enrolled, but has lost eligibility, as listed on the Pending Plan Enrollment/De-Enrollment form.

Pending eligibility segment
Plans for which an employee is eligible but not enrolled, as listed on the Pending Plan Enrollment/De-Enrollment form.

Performance appraisal
A periodic assessment and ranking of an employee's skills and accomplishments.

Performance appraisal rating
A method of ranking the performance of an employee during a given period using options ranging from 1-Outstanding to 5-Unsatisfactory.

Performance rating
A method of ranking the performance of an employee during a given period using options ranging from 1-Outstanding to 5-Unsatisfactory.

Performance-related pay
Monetary payments made to employees based on how well an employee has fulfilled job expectations.

Perquisites
Property or privileges extended to an employee.

Personal days
Authorized absences that are generally considered as paid time away from regularly scheduled work, but can be either paid or unpaid.

Phonetic keys
The keys you use to access employee data using the phonetic spelling of an employee's last name.

Pixel
The smallest rectangular area of an image on a screen.

Plan deactivation
A process that makes a plan inactive and prevents future employee enrollment.

Plan ID
A three-position, alphanumeric identifier for a plan in the system.

Plan shutdown
The process of de-enrolling an employee from all benefits plans because of a separation activity.

Plan year
The 12-month period over which a salary budget is effective.

eCyborg Interactive Workforce specific—The calendar, policy, or fiscal year in which the records of a Benefits plan are maintained.

Policy tables
Highest level tables that are used to record the generic (or master) rules for an organization or group of employees. These included your organization's rules relating to working time procedures, such as clocking in and out, docking for lateness, and overtime. Each

policy consists of a Policy Master table and one or more Policy Activities table.

Pop-up menu

A menu that appears when you use the second mouse button within the system. This menu contains context sensitive commands and options that relate to the object you have clicked on.

Portable document format

See PDF.

Position

A specific role with an organization—for example, Accounts Manager.

Alternative definition: to place an object in a specified location.

Position Administration Control Number

Two-character alphanumeric value that tells Position Administration which tables to use for a specific company.

Position complement

A 'Position complement' is the value of a Position. The organization complement is the total value of all Positions included in the complement.

Position in range

The difference between a given salary and the minimum of the salary range, divided by the difference between the range's maximum and minimum, and expressed as a percentage.

Posttax

A contribution made after taxes have been withheld from earnings.

Premium

The amount of money an organization agrees to pay an insurance company for a policy or annuity, or the amount contributed by an employee to the employer to cover the employee's portion of the total premium.

Prenotification

Informing a bank or credit union that an employee will be using direct deposit with them in the future. Cyborg recommends that you fill out the Direct Deposit Information form two pay periods in advance of the first deposit date. This ensures that a prenotification record is provided to the bank or credit union in a timely manner.

Pretax

A contribution made before taxes have been withheld from earnings.

Primary account

The account set up in eCyborg Interactive Workforce to receive an employee's pay or reimbursement checks. After deductions and deposits to additional (secondary) accounts, the remainder of pay is deposited into the primary account.

Process

A subset of a component that logically groups tasks on the Navigator or menu. For example, the process 'Maintain Employee Details' contains tasks such as 'Basic Employee Information' and 'Personal Information'.

Alternate definition: An action that brings about a result.

Process bar

The graphical representation of a process on the navigator. Each process bar is within a Component.

Program

A program is a series of classes being administered using Training Administration. For example, 'The Cyborg Training Schedule for January-June 1996' may be a program consisting of eight different classes.

Alternative definition: a form or other program within the system, accessed directly from the Command dialog box. For example, form EF-SCR is a program.

Protected amount

The amount of disposable income protected from garnishment in the US This amount may vary from state to state.

Prototype HED

An HED defined on a benefits form for use in recording employee/organization contributions when an employee is enrolled in a benefits plan. This allows the setup and maintenance of payroll deductions using Benefits Administration.

Provider
A provider is an instructional institution, organization, or person who is available to teach training courses.

Push button
A button on the interface which appears depressed when clicked on (now known as command button).

Quartile
Points that represent the division of a salary grade range into four equal parts.

Query alternate keys
The keys you use to access the employee master record in an order other than by primary key.

Query primary keys
The keys you use to direct your QUERY program to a record type.

Quick Hire
The process of hiring an employee by entering one two-panel form with the required data elements rather than entering a series of forms.

Radio button
A button on a form that selects an option, the radio buttons that make a field are mutually exclusive (now known as an option button).

Recall
Return a laid-off employee to active status, usually with no affect to benefits.

Reciprocal taxation
Reciprocal tax withholding refers to agreements made between US states and (or) localities regarding income tax calculation and reporting for compensation paid to an employee who lives in one state or locality and works in another.

Record
A complete set of fields, such as the fields that make up a tax form or a name and address record.

Alternate definition: To set down for preservation in writing or other permanent form.

Recruitment
Process of finding and hiring new employees who meet the needs of your organization.

Recycle File
P05IN; A file that contains employee data and pay document information required for payment reconciliation. It also contains time entries to be processed and paid at a later date. This file is used to pass data to the next payroll or maintenance run.

Registration
Registration is the act of enrolling an employee in a class.

Registration number
A three-digit registration number is assigned to employees for tracking purposes when they register for a training class. This enables the order in which the employees registered to be viewed.

Rehire
The process of hiring a former employee of your organization. Typically, a break in service is incurred and benefits must start over (usually requiring a new adjusted seniority date if used in benefits tracking).

Reimbursement account
The account into which employee's travel and other expense type reimbursement checks are directly deposited.

Reinstatement
The process of returning a former employee to active status within a certain time period (such as 90 days), thus qualifying the employee to have certain benefits restored to the original hire date.

Reject time
The point at which an error condition will occur. An error condition must be manually corrected/approved and approved before a time entry can be generated by the system.

Relocation
The process of moving an employee from one organization to another geographic location, whether the move be domestic or international. This process also applies to applicants who are being relocated as part of the hire process.

Remaining net pay
The 'bucket' of money that is left after all employee deductions and taxes have been taken from the employee's gross pay. This 'bucket' of money can then be used for multiple deposits if the enterprise sets up multiple deposit HEDs.

Replication
The automatic process of writing changes made in the Employee Database and option lists and tables in the System Control Repository to the Replication Holding File (FILE08).

Replication Application
English Language program (DSAPLY) that reads records from the Replication Packet File (FILE20) produced by the Replication Reception program (DSRECV) and updates the System Control Repository and Employee Database accordingly.

Replication Distribution
Two COBOL programs that work together to distribute and receive updates. The Replication Distribution Program (DSTRIB reads either the Replication Holding File (FILE08) or a Replication Packet File (FILE20), selects data applicable to a specific DL and writes all necessary data to a new output-only Replication Packet File (FILE21). The resulting FILE21 will be processed on the remote DL via the DSRECV Replication Reception program.

Replication Holding File
FILE08. This file contains additions, changes, and deletions to the System Control and the Employee Database. Data is distributed from and written to this file, based on the data distribution rules configured for the target DL by the source DL.

Replication Packet File
(FILE21/20). This file contains data changes and is created specifically to update a target DL. This information may include Company/Employee data, tables and option lists, and time entry and adjustment records.

Report
The term report refers to a report produced on paper.

Report Generator
A program that produces the batch payroll and the batch payroll reports.

Report Group
A series of packaged reports that are created using the Report Group Activities form and are run together.

Report Group Scheduler
This is the program that allows you to schedule reports. This was formerly known as the Report Scheduler.

Report parameters
Specific guidelines for determining the information to be processed by a given report or program.

Requisition
A formal request to fill a vacancy or vacancies.

Requisition candidate
A candidate for a vacancy represented on a requisition.

Requisition limit
A total unit value of a requisition.

Requisition unit
The value of a requisition expressed as an FTE, hours, salary or headcount.

Retirement
Occurs when an employee retires from the organization.

Return
The activity of an employee returning as an employee to active status, usually following a leave of absence.

Alternative definition: key on keyboard used to perform a carriage return, can also be known as Enter.

Review process
A method used by an organization to evaluate an employee's salary or performance in a standard, timely manner.

Roll-up reporting
Option that enables packaged reports to be processed within organizations (roll-up).

Rotation pattern
A way of describing the working pattern for a group of employees (crew) who regularly work different shifts.

A crew is a group of employees who together regularly work the same schedules according to a rotation pattern.

Safety standards
Legally-mandated workplace safety standards.

Salary budget record
Defines, for each employee, the budgeted increase amount, percentage, and effective date for a specific salary plan year, and the prorated effect of this increase on the budget in terms of amounts and percentages for each employee.

Salary grade
A range of salary amounts associated with a particular job.

Salary grade range
A range of salary amounts associated with the salary grade for a particular job.

Salary plan
A set of rules or guidelines used to budget for salary increases for the coming year.

Salary plan year
A 12-month period over which a salary plan is effective.

Salary range
The span of salary amounts from the minimum to the maximum of the employee salary grade.

Salary review
A periodic evaluation of an employee's compensation.

Salary review authorization form
Hard copy format of the employee criteria necessary to review and approve proposed salary increases.

SAT file
The Solution Series form appearance table. Simple text file that reflects the form's layout.

Save Changes
Saves the page (form) the user completed. (When you click 'Save Changes', eCyborg Interactive Workforce saves the information on the page whether or not the user made changes.)

Schedule Activities table
Identifies activity types for each point in a work day where the process of clocking in and out should be dealt with. Each Schedule activity also contains time parameters that will be used to calculate whether an employee will be docked or credited time.

Schedule assignments
Also referred to as a schedule. This term refers to the details of the Schedule Master tables to which an employee is assigned. These details include the date the assignment took place, the Schedule Number and Sub-Schedule Number, and (if applicable), the crew to which the employee is assigned.

Schedule error
Occurs when a clock transaction (ring) time falls outside of an employee's schedule reject times.

Schedule Master table
Used to set up your organization's Time and attendance rules (such as HEDs and the minimum number of hours an employee must work before a meal deduction is made). A Schedule Master table is associated with a Calendar Routine, earnings Code, and Shift Premium table by entering the appropriate identifier.

Schedule number
A unique three-character alphanumeric identifier used to partially identify a schedule table.

Screen
Now known as a form.

Scroll bar
When information on a page takes up more than one screen of your monitor, the system adds scroll bars to the right side of the screen. On the scroll bar:

- Click the up arrow to move line by line to the top of the page
- Click the down arrow to move line by line to move to the bottom of the page
- Click the double arrows to move several lines up or down the page

Click and drag the bar in the scroll area to manually move up or down the page.

Search argument
The value from an employee's master record used to search benefits tables to apply plan rules to specific groups of employees.

Search type
The definition of a field from an employee's master record to use as the search argument.

Secondary account(s)
Additional account or accounts at financial institutions that employees set up in eCyborg Interactive Workforce receive a portion of their pay. A primary account must be defined before an employee can set up additional accounts.

Security Officer
The assigned employee who is responsible for the setting up and monitoring of the security your Cyborg system.

Self-adjusting taxes
Taxes for which the system automatically recalculates the tax on a cumulative year-to-date basis on each payroll run.

In the U. S. these include FICA taxes: Social Security (tax record 101) and Medicare (tax record 103). The purpose of this calculation is to avoid any differences (of pennies) in FICA tax paid versus FICA tax due at year-end due to rounding on a pay period basis. In addition, certain state disability taxes and employee-paid state unemployment insurance taxes also self-adjust.

Sequential Master File
P20IN; The batch processing version of the Employee Database. This file contains organization and employee data, tax tables, and the object code for programs.

Service interruption
A period of time during which an employee did not maintain an active working status in the organization.

Service method
A calculation option list that determines the method for calculating credited service.

Session
When users log onto a software application, they begin a session. When they log off, they end the session.

Alternate definition: The period of time during which a class is held.

Shift
An employee schedule assignment for a given day. For a rotation pattern, this is a Sub-Schedule Number.

Alternative definition: key on keyboard, typically used to describe key combinations for a shortcut key.

Shift premium
A premium (or differential) added to an employee's regular earnings, overtime earnings, or both. It is represented by a shift code or HED Number.

Shortcut menu
A menu that appears when you right-click within The Solution Series 4. This menu contains context-sensitive commands and options that relate to the object (form, Navigator, and so on) on which you have clicked.

Sick days
The time off that an employee is allowed to take due to illness as a result of an employment contract or organizational policy.

Solution View
An online utility that provides the tools for creating new forms, fields, and report programs without the direct use of Cyborg Scripting Language.

Source DL
The node that owns the data being distributed. Depending on the rules established, the same DL can alternate from source to target.

Special assessment
Extraordinary or temporary taxes, such as additional employer-paid or employee-paid contributions to state unemployment programs or to mandatory health insurance programs.

Spinbox
A control on the interface composed of a text box and increment and decrement buttons that allow you to adjust a value from a limited range of possible values.

Spreadsheet application
Software for recording ledger entries, creating worksheets, graphing data, and other accounting functions.

Standalone Time and Attendance
Customers who are using the Cyborg's Time and Attendance Administration but not the Cyborg's Payroll Administration.

Static data
Includes organization and employee information, such as name and salary.

Static SQL
Data Definition Language (DDL) and Data Manipulation Language (DML) statements embedded in application programs.

Status bar
The bar that appears at the bottom of The Solution Series window. The Status Bar displays useful information, such as your current session number, the currently displayed organization and employee, and so forth.

Statutory employee
Any of the four categories of workers who are independent contractors under common law and are treated by statute as employees. These include:
(1) a driver who distributes beverages (other than milk) or meat, vegetables, fruits, or bakery products; or who picks up or delivers laundry or dry cleaning, if the driver is your agent or is paid by commission.
(2) certain types of full-time insurance sales reps
(3) an individual who works at home on materials supplied by you that must be returned to you
(4) certain full-time traveling or city salespeople.

Social Security and Medicare (FICA) taxes may or may not be withheld. Income taxes are not withheld from a statutory employee. A statutory employee will receive a W-2 with the 'Statutory Employee' box checked.

Sub-schedule number
A two-digit numeric text box used to further identify a schedule table.

Succession planning
Finding and developing employees for placement into identified key positions that are expected to become vacant sometime in the future.

Summary page
To help you see information at a glance, eCyborg Interactive Workforce uses summary pages. The summary page displays a short view of detailed information. For example, all your emergency contacts appear on a summary page. You delete the contact or proceed to the detail for the contact from the summary page.

Summary plan
A customer-owned description of a benefits plan.

Supplemental wages
Wages that are separate from regular earnings may be classified as supplemental wages and taxed using the default method. The default method means using a set percentage specified by the tax authority. Examples of such earnings are bonuses and commissions.

Surplus
A 'surplus' is an exceeded complement position.

System administrator
An individual responsible for maintaining a multi-user computer system, including a local-area network (LAN). Typical duties include:

- Adding and configuring new workstations
- Setting up user accounts
- Installing system-wide software
- Performing procedures to prevent the spread of viruses
- Allocating mass storage space

System Control Repository
This is the file that contains system definitions for The Solution Series, (FILE01).This was formerly known as the Control File.

System Generator
A type of Report Generator that performs system functions, such as defining data elements and system messages.

Table
Contains an organization's rules and policies and controls what actions take place at the employee level.

Alternative definition: means of displaying information in columns and rows.

Table Definition Record
Table containing data about the Position Administration table records, including the location of keys to associated tables.

Target DL
The node that receives the data being distributed. Depending on the rules established, the same DL can alternate from target to source.

Task
The lowest level of organization on the Navigator or menu, generally equivalent to a form. checklist, or dialog.

Task icon
An icon denoting a task. Task icons describe the type of task, including Forms, Checklists, Dialogs and others.

Tax authority
A government agency to which an employer and employee has statutory tax obligations. The tax authorities for which you handle taxes exist at the federal, state/province, and local levels.

Tax Authority File
A Cyborg-supplied file that contains all the tax-specific information needed to calculate taxes for tax authorities. This includes wage-bracket tables for different marital statuses and information relating to allowances and standard deductions. The sources for the contents of this file are tax specifications published by the various tax authorities.

Tax code
The three-character to seven-character Cyborg-supplied reference code that identifies a tax and that serves as the link between the Tax Specification Record and the employee tax record.

Tax Maintenance File
One of the two Cyborg-supplied tax files. A Tax Maintenance File is a file issued by Cyborg in conjunction with a Tax Update Bulletin (TUB). It contains all the tax specifications that are being updated in the bulletin, in the form of tax specification transactions. These transactions are typically used as input to the batch maintenance run in which tax updates are applied.

Tax specification
Each tax authority publishes tax specification information that specifies how each tax must be administered. This information specifies how employers should calculate taxes and how taxes should be withheld from employees (if withholding applies). The tax specifications can be in the form of tax formulas and (or) tax tables.

Tax Specification record
A record on your Employee Database that contains the tax specifications for a tax. The record contains all the information, as obtained from the governmental authority, needed to calculate tax amounts for the tax. The record may contain more than one tax; for example, US state Tax Specification records contain information for both state income tax and state unemployment insurance. Once a Tax Specification record is activated, tax specification information from the Cyborg-supplied tax files can be loaded onto the record on your Employee Database.

Tax table
A set of information required to calculate a tax, for a specific set of employee parameters. Tax tables are stored and maintained in Tax Specification records. A table typically includes wage and bracket information and data relating to allowances, such as personal exemptions and to standard deductions. There can be several tables relating to marital and resident status in a given Tax Specification record.

Tax type
This term refers to various categories of taxes, for example, income, National Insurance, unemployment, disability, Social Security (FICA-OASDI), and Medicare (FICA-HI).

Taxability
The term refers to whether an hours, earnings, and deductions amount is to be included in taxable wages to be accumulated for a specific tax. If the hours, earnings, and deductions amount is excludable, then the amount is not included in taxable wages. If the hours, earnings, and deductions amount is taxable, then the amount is included in taxable wages. The term fully excludable or fully taxable implies that more than one type of tax is being referenced, for example, state income tax and state unemployment insurance in the US.

Taxable wage base
The taxable wage base represents the maximum amount of an employee's wages on which tax is levied and after which there is no liability. A wage base in the US

typically is in effect for FICA, unemployment taxes, and disability.

Tax-related Regulatory Bulletin

A TUB contains the updates to tax specifications supplied by Cyborg, consisting of a bulletin document, a tax file that contains the updated tax specifications, and a printed listing of tax specification transactions with the updates.

TDR

Table Definition Record.

Template

A basis from which to create a custom item. For example, you can use an existing Cyborg report as a template for your custom report.

Temporary password

A set of alphanumeric characters used with a user ID to limit access to a software application. The system requires that users replace their temporary password with a user-defined password within a certain number of days.

Termination

The activity of an employee no longer being employed by the organization.

Test environment

A separate organization or system partition used only for testing.

Text box

A control on the interface in which text can be entered and edited (formerly known as a field).

Text qualifier

The character surrounding an item between delimiters. All values between the qualifier are data items and are not scanned for a delimiter. This allows a delimiter character, such as a comma, to be a valid data item. Example:

"item 1","item 2","item 3, 4 and 5"

This string contains three data items:

Item 1

Item 2

Item 3, 4 and 5

Although the third item contains a comma, it is ignored as a delimiter because it is between the text qualifier of speech/quotation marks (").

Time entry

The form in which you enter the hours worked for an employee. This was formerly known as a Time Card.

Time entry extract file

A file of time entries external to the Time and Attendance Solution that is used to feed to payroll.

Time entry validation

The Time Entry Validation/Creation program identifies and assigns an activity, for example Clock In (1), to each clock transaction (ring) when performing the validation function. Each clock transaction must be assigned to an activity, in order for time entry hours to be calculated for an employee, for a particular shift. This program validates clock transactions (rings) and generates time entries.

Timeout

The period of time that elapses before a user's eCyborg Interactive Workforce account becomes invalid because of inactivity.

ToolTip

A standard Windows control that provides a small pop-up window that provides descriptive text, such as a label, for a control or graphic object.

Top-down appraisal

Appraisal made by a supervisor or manager of an employee's capabilities. Such an appraisal is generally based on the supervisor's or manager's day-to-day observation of an employee's work performance and will usually include an appraisal interview with the employee.

Trainer

Trainers are set up on the Provider Index Form. They are instructional institutions, organizations or persons who are available to teach a training class.

Trainer code

The trainer code is a four-character value that represents a trainer. This value resides in Option List TR38.

Training area
The training area is recorded on the Class Schedule Form. It is typically defined as the section of the organization to which the training applies, such as manufacturing.

Training class results
These are the class details and absence information recorded on the Process Class Results form. Details recorded include the objectives met when taking a training class.

Training class status
The status value is updated and displayed on the Class Schedule Form. It tracks whether the training class is canceled, full or available.

Training course code
The training course code is a six-character value that represents a training course. This value resides in Option List TR33 and is associated with a course title.

Training plan
A plan of training courses that an employee will attend in the future to achieve the necessary skills to perform a job.

Training reason
The reason for training is used to identify why a training request has been made. For example, the purpose of the training to act as a refresher, to acquire new skills, and so forth.

Training request
A training request is a request for an employee to attend a specific course or class. A formal request for training is not essential. This step could be omitted and the employee could be registered directly in the course of his or her choice.

Transfer
Process of moving an employee from one organization to another organization, such as moving an applicant from the applicant organization to the active employee organization.

Alternative definition: to move data or files from one computer to another

Trend analysis
Reporting or statistics that indicate the rate of change in costs and other elements of a benefits plan.

Trigger
A set of conditions that must occur for an email or letter communication event to start. This can involve the creation, deletion, or modification of forms or checklists within the system.

Tuition reimbursement
Remuneration made to employees for tuition expenses.

Type of training request
The type of training request indicated whether the employee was required to attend the training or whether he or she asked to attend the training.

Unauthorized absence
Absences that are generally not considered paid time away from regularly scheduled work.

Underlined text
In browser applications, text that provides a link to another screen or page.

Unemployment insurance tax
A tax required by some US states to be funded by employee-paid contributions to pay all or part of the cost of unemployment insurance coverage. On the Payroll Solution, state unemployment insurance tax records are established as Type 2 taxes.

Unpaid absence
Employee absence that will not be paid by the organization. A time entry will not be created for this absence.

Upward appraisal
Appraisal that calls for evaluations by those who work under the direction of the employee being evaluated.

URL
Acronym for uniform resource locator. A standard way of specifying the location of an object, typically a web page, on the Internet. URLs are the form of address used on the World-Wide Web. They are used in HTML documents to specify the target of a hyperlink which is often another HTML document (possibly stored on another computer).

User class
Cognos Impromptu assigns security according to configured user profiles. These security profiles are configured by your Impromptu administrator.

User code
A set of characters (up to eighteen alphanumeric characters) that, along with the password, identify the user to the system as a valid user user when they log on.

The user code is case-sensitive (upper case, lower case) and must be entered using the correct case.

User defined password
A set of alphanumeric characters created by users that allows them to view and update information in a software application.

User ID
A set of characters that identify you to the software application. The application contains a list of authorized users by user ID. When you attempt to log on, the system checks the list of authorized users to determine whether you have authority to use the application.

User profile
Used for security purposes to determine what you can and cannot do while you are using the system, and which parts of the system you can access. A user profile is created and maintained for you by a Security Officer. Each user of the system will have a user profile.

Vacancy
An open position that needs to be filled, or an unfilled complement position

Vacation days
The time off that an employee is entitled to as a result of an employment contract or due to length of service.

Validation
The process where the Time Entry Validation program identifies and assigns an activity to a clock transaction (ring) when performing the validation function.

Variant forms
Method of displaying country-specific variation of Cyborg-delivered forms.

Waive
The act of choosing not to enroll in an optional benefits plan.

Warning time
Used to set a period of time after which an employee will appear on the exception report for a particular activity. A Warning condition will allow the creation of a time entry. A Reject condition will not. This is part of the Time and Attendance Administration.

Welfare benefit plan group
First level of the logical organization of welfare benefit plans in eCyborg Interactive Workforce.

Welfare benefit plan subgroup
Second level of the logical organization of welfare benefit plans in eCyborg Interactive Workforce.

Welfare plan
Any insurance or other benefit plan that provides immediate benefits to a participant—for example, medical insurance.

What-if mode
Method for processing a report that allows viewing of information without updating of employee records.

Window
A standard Windows object that displays information. A window is a separately controllable area of the form that typically has a rectangular border.

Wizard
A form if user assistance that automates a task through a dialog with the user.

Work area
The Solution Series screen. It includes the menus, toolbars, Navigator, forms area, message area, and status bar.

Work instructions
Specific tasks to be completed during the migration of data and files from test to production.

Work restrictions
Restrictions that prevent an employee from participating in specific workplace functions.

Worker's compensation
Legislation in the US that provides compensation to employees who suffer work-related injuries.

Workforce competency
The capacity of the overall workforce to perform required functions and sets of activities.

XHTML
Extensible HyperText Markup Language, used by the help pages for eCyborg.

Year End Master File
P20OUT file from the final payroll run of the year

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eCyborg

Using the Web Client

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Contents

PART 1

Introduction

In This Section

CHAPTER 1

About This Manual

Welcome

This manual has been designed to guide you through the use of eCyborg to perform your business tasks.

This manual has been designed as a reference document. You will find sufficient detail for self-study.

Who should use this manual?

This manual is designed to be used by anyone who will be working with eCyborg using the web client. It will be useful to new users and to users who are upgrading from previous versions of Cyborg's systems. Users already familiar with the Windows interface to products from Cyborg Systems, Inc. should have no difficulty in using the eCyborg web interface.

The Web Client is also designed for users who want to access the system from remote locations, such as when they work at home or when they are traveling.

We believe that users who have an administrative or implementation role in client functionality would find the administrative client guide more useful to them.

☞ *Refer to the Using The Solution Series: Administrative Solutions or Optimizing System Features documentation for more information on administering client functionality*

Prerequisite skills

Users of this manual should have a basic understanding of using a web browser.

How this manual is organized

This manual has been organized to make it as easy to use as possible. The chapters are grouped accordingly into the following parts:

Part	Chapters	Description
1. Introduction	1-3	Provides an overview of the manual and eCyborg.
2. Working with eCyborg	4–7	Provides concepts and detailed instructions for navigating, using support tools and entering, modifying, and deleting data.
3. Appendices	A–B	Provides detailed reference information.

Following are descriptions of the chapters within the parts:

Part 1: Introduction

The chapters in Part 1 describe this manual and provide an overview of eCyborg:

Read this chapter		To learn about
1	About This Manual	How the manual is organized, where to find what you are looking for, who should use the manual, and where to get help.
2	Overview of eCyborg	The functions and features of eCyborg.
3	Getting Started	Logging on and off, and changing a user code and a password.

Part 2: Working with eCyborg

The chapters in Part 2 describe how to utilize and navigate the Work Area:

Read this chapter		To learn about
4	Exploring the Work Area	How the Work Area is organized, and about the toolbar and the Navigator.
5	Navigating the System	Different ways of navigating through the system and displaying information.
6	Using the Support Tools	The types of support tools, including help files and online manuals.
7	Working with Data	Viewing, adding and modifying data, employee information deletion and system messages

Part 3: Appendices

Part 3 contains the following quick reference appendices:

Use this appendix		To learn about
A	Dialog Quick Reference	Quick reference information on the dialogs used in eCyborg.
B	Practice and Review Answers	Detailed answers to the practices and reviews at the end of the instructional chapters.

How to use this manual

This manual has been designed as a reference manual as well as a training manual. It has been written to facilitate self-study before and after classroom training.

Table of contents

The manual has been carefully designed for ease of use. All our manuals are written to be task oriented to help you complete your business tasks using our software.

The table of contents lists all the tasks and their respective chapters.

Glossary of Terms

A Glossary of Terms section is provided to explain terms used in the documentation.

Index

An index is provided to help you locate specific information.

This document was designed to reduce your need for an index. You should find the table of contents sufficient.

Introductory chapters

It is important that you read the introductory chapters first. Chapter 1 ensures you get the most out of the information we have provided. Chapter 2 provides a high level overview. Read it to get the big picture before reading the detailed instructional chapters.

Instructional chapters

All chapters, other than the introductory chapters, are instructional chapters. They contain detailed instructions on how to complete the business tasks. Each instructional chapter has the following distinct sections:

Key Concepts

Always read the conceptual information first. This will help you understand why you have to perform certain tasks. It will also help you make decisions about your options and help you understand the importance of performing certain tasks. Exercises to help you apply the concept to a business task are included at the end of most concepts.

Apply the Concept

To be certain that you have understood the key concepts in a chapter, complete the Apply the Concept exercises provided. The answers to these exercises can be found in the appendices.

Detailed Directions

When you are ready to perform a task, review the Detailed Directions, which provide guidance, as well as the specific steps, to complete a task.

Guided Practice

The Guided Practice within the Detailed Directions offers you an opportunity to practice a task with step-by-step instructions. It takes you through the various steps, providing detailed examples so you can gain a comfort level with the task. Guided Practice is easy to locate.

For practice, type 'ABC Solutions'.

Note: *To successfully follow the Guided Practice, you must have completed all the previous Guided Practice exercises in the manual. The Guided Practice uses the test data installed with our software. For the Guided Practice exercises to work, this test data must not have been altered.*

All users who complete the Guided Practice must either have their own copies of the test data or have the test data restored for them.

Extended Practice

To be certain that you have understood the tasks in a chapter, complete the Extended Practice provided. The Extended Practice gives you the opportunity to complete one or more tasks without step-by-step guidance. The answers to these exercises can be found in the appendices.

Note: *To be able to complete the Extended Practice exercises in the manual, you must have completed all the previous exercises. You must also be using the test data delivered with the software. This test data must not have been altered.*

Review of Questions Answered

To be certain that you have understood all of the information in a chapter, complete the review questions provided at the end of a chapter. The answers to these questions can be found in the appendices.

Conventions used in this manual

The underlying page layout and design of this manual are meant to be as intuitive as possible for you. Our intent is to make it easy to navigate through the manual and concentrate on learning and doing.

Cross-references

Wherever appropriate, we provide cross-references to help you find additional information or further discussion of a specific topic.

☞ *Refer to a cross-reference to find more detail or more discussion on a given topic.*

Notes

Whenever there is important information you should be aware of, we provide a note.

Note: *You will find tips or quick techniques covered in notes.*

How to get additional help

If you can not find the answers to your questions in this manual, contact Customer Support, who will be able to answer specific questions and give you general advice on training.

Please visit our web site ***www.Cyborg.com*** (see "Cyborg Home - http://www.Cyborg.com") for the latest schedule of available courses and course descriptions.

Suggestions and feedback

We value your feedback on our performance support materials. Please forward any comments on this manual to Customer Support.

CHAPTER 2

Overview of eCyborg

In This Chapter

Introduction

This section section provides you with the 'big picture' of eCyborg. You will learn how it is organized into components, how your organization and its employees are identified to the system, and what reporting options are available.

eCyborg components

From a broad perspective, eCyborg consists of the following components:

- Administrative Solutions
- Web Architecture
- eCyborg Interactive Workforce
- eCyborg Analytics

How these components are related is illustrated in the diagram below:

eCyborg contains both the Windows client (known as The Solution Series, or Administrative Solutions as shown in the figure), and the Web Architecture components.

Administrative Solutions

The Solution Series® 5.0 contains the functionality of our traditional, core product (formerly known as *The Solution Series/ST*) and the Workforce Data Mart. The Solution Series is targeted to departmental (HR and payroll) users, sometimes referred to as power users.

To use The Solution Series, you would access the system from your desktop (client) machines. Your desktop machine would need to have a Client Data File, and the data is displayed in Windows. The Windows client installation is known as ‘Administrative Client’.

The Solution Series provides the following administrative functionality:

- Human Resources Administration (including Training Administration, Salary Administration, and Position Administration)
- Benefits Administration
- Payroll Administration
- Time and Attendance Administration
- Distributed Administration
- Reporting Administration

☞ *Refer to the Using The Solution Series: Administrative Solutions documentation for more information on using the administrative client.*

Web architecture

The Web Client

The Web Client provides browser-based access to the HR and Payroll functionality of The Solution Series. This means that no Client Data File is required on a machine to access eCyborg. Because only a browser is required on the machine accessing the system, you may hear this referred to as a 'zero footprint client'.

Browser-based access does not mean that any employees who learn the URL for eCyborg can access the system—the same security required to access the system from the Administrative Client is required to access the system from the Web Client.

The Collaborative Platform

The Collaborative Platform enables the eCyborg product line, not just the eCyborg product, to interface with other web-based products, such as recruitment boards. Here are some examples of web collaboration:

- Embedded links to other applications, such as benefits providers
- Sending job postings to job boards
- Obtaining applicant data from job boards
- Tax processing and filing services

eCyborg Interactive Workforce

Interactive Workforce is a member of Cyborg's family of web-based applications for HR management. It has been developed by Cyborg Systems to integrate with the best-in-class HR Management Solution.

Interactive Workforce is a web-based employee self-service application that gives your employees real-time access to view, add, and update their personal information via a user-friendly, web-based interface. It does not display the forms used in the administrative solutions; rather, Interactive Workforce presents web pages on which users enter or update information.

Interactive Workforce gives managers real-time access to data about their team and the ability to approve employee requests.

The modules included in eCyborg Interactive Workforce are:

- Interactive Employee
- Interactive Benefits
- Interactive Manager

☞ *Refer to the Interactive Workforce documentation for more detailed information on the configuration and use of this functionality.*

eCyborg Analytics

eCyborg Analytics refers to the web-based capabilities offered through Cognos' PowerPlay Web product. With Reporting Administration, we deliver two Workforce Planning models: one for Position Administration and one for non-Position Administration data.

☞ *Refer to the Using Reporting Administration documentation for more details on using PowerPlay.*

Application solutions

eCyborg provides an integrated solution to your organization's Human Resource processing needs. eCyborg offers the following administrative solutions:

- Human Resources Administration
- Benefits Administration
- Payroll Administration
- Time and Attendance Administration
- Distributed Administration
- eCyborg Analytics

Human Resources Administration

Human Resources Administration provides organizations with a comprehensive, strategic solution to their human resource management requirements in these mission-critical areas:

- Employee Resourcing
  - Recruiting and selecting employees
  - Hiring, rehiring, reinstating, recalling, or transferring employees
  - Managing employee attendance
  - Managing employee status changes, leaves and returns, and separations
  - Position Administration and Complement Control
  - Requisition Tracking

- Employee Development
  - Tracking employee skills, competencies, and training
  - Tracking performance appraisals
  - Training Administration

- Employee Relations
  - Managing employee health and safety
  - Tracking disciplinary actions and grievances

- Employee Compensation
  - Managing employee compensation
  - Tracking employee relocation expenses
  - Allocating and recovering property from an employee
  - Salary Administration
  - Benefits Administration

☞ *Refer to the appropriate component documentation for more information.*

Benefits Administration

Benefits Administration is an integrated component of Human Resources Administration. It is designed to help you manage every aspect of your benefits programs.

The following are important features of Benefits Administration:

- Adaptable benefits control structure
- Rule-based tables for benefits plan setup
- Welfare plan administration
- Deferred plan administration
- Flex plan administration
- Spouse, dependent, and beneficiary tracking
- Benefits and retirement counseling
- Organizational and regulatory reporting

☞ *Refer to the Using Benefits Administration documentation for more information.*

Payroll Administration

Payroll Administration provides the capability to internally manage the entire payroll and taxation process. The regulatory compliance, integration of payroll data with other applications, and control offered provide a solution for business operations of any size.

Payroll Administration provides a variety of features including the following:

- Virtually unlimited earnings and deductions
- Comprehensive tax processing and reporting
- In-depth labor distribution
- Bank services
- Multi-currency
- Complete online payment history tracking
- Online pay calculation
- Online retroactive pay calculation
- General ledger interface

☞ *Refer to the Payroll documentation for more information.*

Time and Attendance Administration

Time and Attendance Administration provides a table-driven data structure that gives users the flexibility to quickly and easily define, maintain, and change policy and scheduling rules. Its open design allows a wide choice of:

- Time entry methods
- Computing platforms
- Payroll interfaces

The system calculates all categories of hours for input to the payroll process, based on company-defined pay policies. Time entries for special hours may be created online.

Because Time and Attendance Administration is an integrated component of the system, it shares a common database, and has access to human resource information including employee status, emergency contact data, work restrictions, injury and other medical information, education and training, skills and abilities, and detailed termination data.

☞ *Refer to the Using Time and Attendance Administration documentation for more information.*

Performance support tools

Extensive performance support tools are available, including the following:

- Standard online help—context-sensitive help, cue cards, and so forth
- Full text search—find help by searching all of the help files, or limit the search to a particular help file or component
- Electronic documentation—the complete set of One-Stop Documents that you can view and print

☞ *Refer to* **Using the Support Tools** *(on page 87) for more information.*

Data concepts

No matter what your role, you need to understand the following to work effectively with the system:

- Organizations
- Employee Numbers
- Tables

Organization structure

Your organization's structure will be mapped into organization levels in the system. The first two levels are used to define each company/organization separately on the Employee Database for reporting purposes. These levels relate to the two parts of the six-position Organization number. They are defined as follows:

- Organization (part 1)—Positions 1 and 2. Indicates the highest level within your company/organization's hierarchy. This usually refers to the corporate level.
- Organization (part 2)—Positions 3 through 6. Indicates subdivisions within an organization, or indicates a second level within the hierarchy.
- Organization—Represents a combination of both parts, that is, positions 1 through 6. It is synonymous with company/organization.

Consider the following example:

Organization level	Identifier	Stands for
Organization (part 1)	AC	Acme Department Store
Organization (part 2)	USDV	United States Division

This Organization identifier is typically shown together as ACUSDV.

The system is delivered with a series of test organizations, including the following. Notice that the delivered test organizations all start with 99. Part 2 of the Organization number is different for each:

Organization	Stands for
993333	Acme Manufacturing—unpaid applicants
995555	Acme Manufacturing—retirees
999999	Acme Manufacturing—active employees

Even if you will not be defining Organizations, you need to understand their importance. When working with the system, you must ensure that you are using the correct Organization. Only the current Organization's data will be available to you.

☞ *Refer to* **Navigating the System** *(on page 49) for information on viewing a list of defined organizations and information on changing the current organization.*

Employee Numbers

After your Organizations are defined on the Employee Database, you can begin adding employees. Each employee is uniquely identified by an Employee Number. This number provides access to the employee's data; it is the primary key to the employee's master record.

Employee Numbers are user-defined and have a maximum of 10 characters. You can use any combination of letters and numbers when defining Employee Numbers. However, the first character cannot be an 'L'. During implementation planning, you will determine the format for Employee Numbers in your organization.

Note: *Employee Numbers beginning with an 'L' are treated as 'Labor Only' employees by the payroll calculation program. No checks are produced for these employees.*

Following are examples of Employee Numbers:

- 123456789 (Social Security Number)
- 1234
- AB1234

Employee Numbers must be unique within Organization; the system will edit for duplicates within each Organization. If an employee is transferred to a different Organization, you have the option of changing the employee's Employee Number.

When you work with the system, you indicate what Organization you want to work with, and within that Organization, which employee you want to add or work with.

☞ *Refer to* **Navigating the System** *(on page 49) for information on changing to a different employee.*

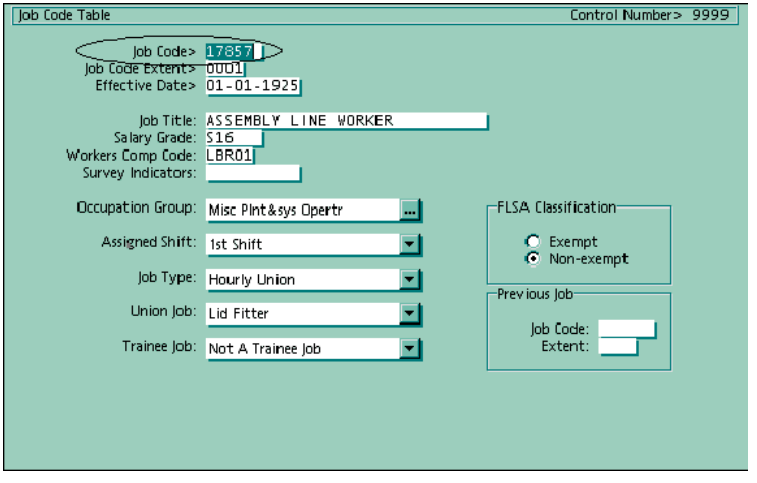
Tables

Most application tables contain standard information about your organization. A few application tables, such as the Company Cross-Reference Table-HR Control Numbers, are used strictly for internal processing.

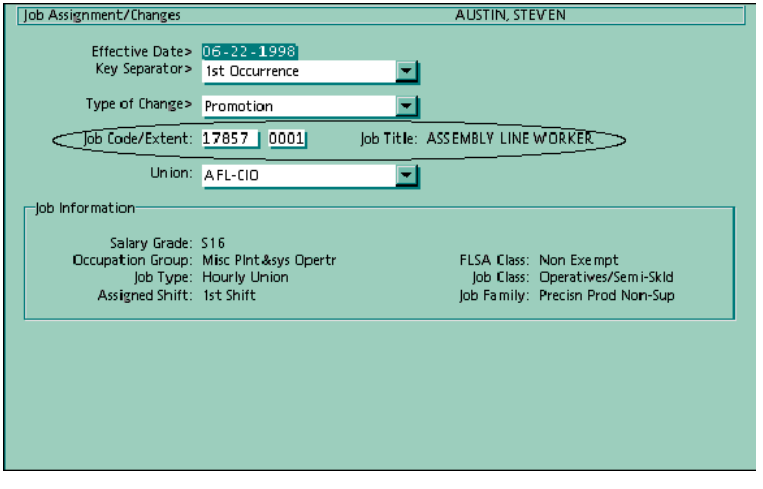
Using application tables greatly reduces the amount of information to be keyed in for an employee; instead, key data entered is cross-referenced to the tables. For example, the Job Code Table contains all possible jobs for an organization and some generic job-related information associated with those jobs. After validation, the information from the tables is referenced by the employee record.

There is a form associated with each table, allowing you to view or modify information. You can also run packaged reports showing the values for each table.

The following figure shows an entry in the Job Code Table form (TA-SCR):



The Job Code defined in this table can then be entered when hiring or promoting an employee. This figure shows that employee Steve Austin has been assigned Job Code 17857. The information set up on the Job Code Table is displayed at the employee level on the Job Assignment/Changes form (05-SCR):



You can use the same tables for all organizations, or each organization can have its own set of tables.

☞ *Refer to the appropriate component documentation for more information on setting up tables.*

Reporting on your data

Cyborg provides several tools to help you analyze and report on information about your organization and employees. These tools are suited for different reporting purposes, and you will achieve the best results by using the tool that best suits your reporting requirement.

Options for reporting on information in The Solution Series include the following:

- Reporting Administration
- Delivered packaged reports
- Solution View (online queries and packaged reports)

☞ *Refer to the Using The Solution Series: Administrative Solutions, Reporting Administration, and Solution View documentation for more information on using these reporting tools.*

Note: You would need to use the administrative client to use these reporting tools.

For the web, Cyborg provides a web-enabled solution to help you analyze information about your organization and employees—eCyborg Analytics.

eCyborg Analytics

This analysis function combines the power of the business intelligence tools from Cognos Corporation, a Cyborg strategic partner, with a value-added relational database (Workforce data mart) package from Cyborg. eCyborg Analytics includes the following:

- The Cognos reporting tool PowerPlay and the delivered Workforce Planning models
- Ability for you to access the Cognos reporting tool from the web

☞ *Refer to the Reporting Administration documentation for more information on using PowerPlay.*

CHAPTER 3

Getting Started

In This Chapter

Introduction

Before you can use eCyborg, you need to be connected to the system. This section describes how to log on to eCyborg and explains what the user code and password are and how they are used.

Tasks

This section explains the following:

- Logging on to eCyborg
- Changing your user code
- Changing your password
- Logging off

Prerequisites

Before you can log on to eCyborg, you must be set up as a user and be given a user code and password by your Security Officer.

Note: *If you have a user code and password from previous versions of the system, you will be able to use them to access eCyborg.*

You need to be familiar with using a web browser (Netscape or Internet Explorer).

You should also be a competent computer user and be familiar with Microsoft Windows 2000 or higher.

Questions answered

The following questions are answered in this section:

1. What information must you have before you can log on?
2. How can user codes and passwords be used as part of your organization's security strategy?
3. How do you log out of the system?

The process of logging on

Logging on to eCyborg is a very simple task. However, before you can log on, your Security Officer will need to give you a user code and a password. You will need to enter these when you log on, as they identify you to the system.

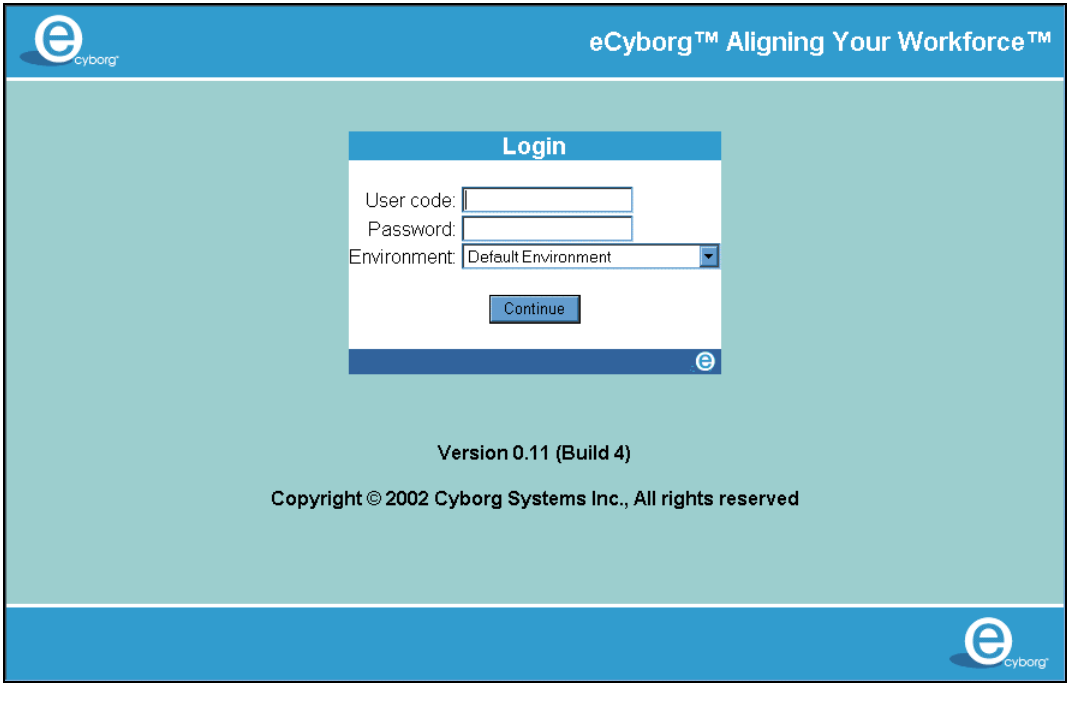
Note: *Your user code and password are used for security purposes and should not be written down or revealed to anyone.*

Note: *Your user code and password can be used to access The Solution Series using the Web Client.*

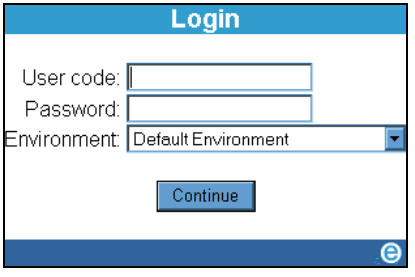
Note: *This user code and password will not give you access to eCyborg Interactive Workforce. If you use Interactive Workforce you will be given a separate User ID and password to gain access.*

The login screen

When you first launch eCyborg you will be presented with the eCyborg Login screen:



The Login dialog



To log on to eCyborg, you must enter the following three pieces of information:

- Your User code
- Your Password
- Environment

Note: *For security purposes, if you enter the wrong password you will be presented with the login dialog continually until you enter the correct login details. If you cannot remember your password, contact your Security Officer.*

Note: *The first time that you log in to eCyborg it may be a little slower than normal to connect you. This is perfectly normal and you will notice that the next time you log in it will be a much faster connection process.*

When you have completed the logon process, the Work Area displays:

☞ *Refer to* **Exploring the Work Area** *(on page 37) for more information on the Work Area.*

Note: If, in a previous session, you started to complete a checklist and then paused the process, the Paused Checklists dialog will display the next time you log on.

See also:

- Logging on with paused checklists ***(on page 24)***

For an explanation of Paused Checklists.

- Understanding user codes and passwords ***(on page 24)***

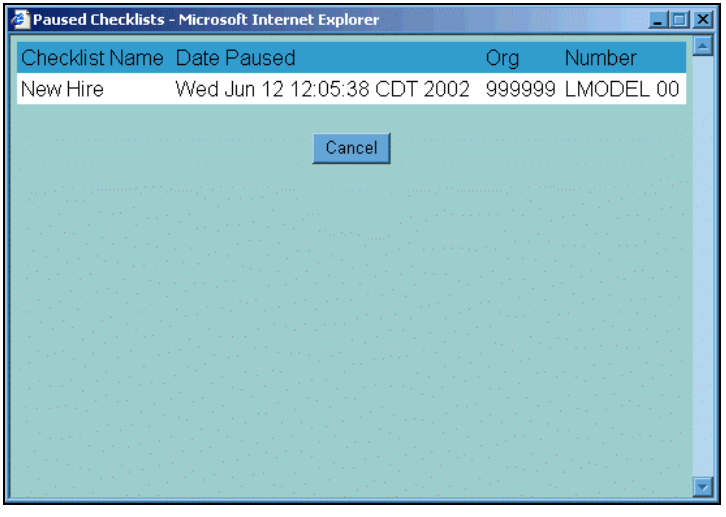
For an explanation of user codes.

- Understanding which environment you should log on to ***(on page 25)***

For an explanation of environments.

Logging on with paused checklists

If, in a previous session, you started to complete a checklist and then paused the process, the Paused Checklists dialog box will be displayed the next time you log on.



You can select a checklist and resume the checklist process.

☞ *Refer to* **Navigating the System** *(on page 49) for more detailed information on checklists.*

See also

- Logging on to eCyborg ***(on page 27)***

For detailed directions on logging on to eCyborg.

Understanding user codes and passwords

When you log on, you are prompted to enter a user code and password, which will be given to you by a Security Officer. They are used by the system for security purposes to identify you as a valid user when you sign on.

Note: Your user code and password are case sensitive (upper case, lower case). You must enter your user code and password using the correct case.

Note: For security purposes, when you enter your password it is displayed as a series of asterisks.

You can change both your user code and password at any time. You may want to change them to something that you find easy to remember. If you want to change your user code, you must use the Change User Code dialog box. If you want to change your password, you must use the Change Password dialog box.

Note: Your organization may not allow end users to change their password—you may not have access to the Change Password dialog box.

Note: The system may be set up to prompt you to change your user code on a regular basis.

See also:

- Logging on to eCyborg ***(on page 27)***

For detailed directions on logging on to eCyborg.

- Changing your user code ***(on page 29)***

For detailed directions on changing your user code.

- Changing your password ***(on page 30)***

For detailed directions on changing your password.

Understanding which environment you should log on to

When you log on, you are also prompted to select which environment you want to log on to. Typically an organization will have two environments—a test environment that is used by new users while they learn how to use the system and a live environment which contains your organization's data.

Your organization may have other environments, such as a test environment for year-end testing. When you log on, you must select which environment you want to use.

When you are assigned a user code and password, you should also be told which environment to use.

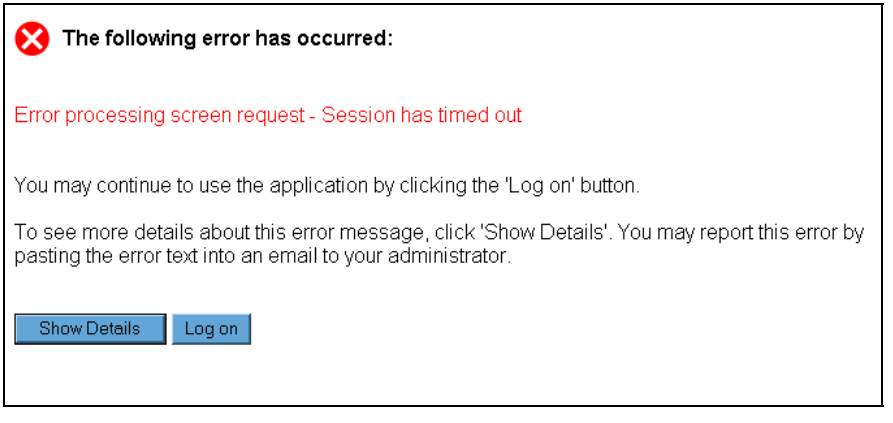
Logging out

You can log out from eCyborg using the Logout button on the toolbar.

Note: *It is important that you log out using this button, rather than simply closing your browser window by using the X on the top right corner of the window as your eCyborg session may still remain active.*

> ***IMPORTANT***
>
> *Be aware that if you navigate to another web page without first logging out from eCyborg, your eCyborg session will still be active.*

You will be automatically logged out after a period of inactivity. If this happens you will see an error message similar to this example:



Your system administrator will be able to tell you how your system is configured and therefore after how many minutes of inactivity you will be logged out.

Note: *This, or a similar, error message may appear at other times when using the system—if it does, contact your System Administrator. It would be helpful to copy and paste the text shown in the message box when the Show Message button has been clicked into an email, as this could be useful information for your administrator or the Cyborg support team when determining the problem.*

See also:

■ Logging out of eCyborg ***(on page 31)***
For detailed directions on logging out of eCyborg

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Logging on to eCyborg

To log on to eCyborg, follow these steps:

1. Access eCyborg

eCyborg can be accessed from a URL given to you by your administrator.

For practice, access eCyborg.

2. Type Your User Code

Type your user code in the User code text box of the Login dialog. This will initially have been provided by your Security Officer. A user code can be up to 18 alphanumeric characters long.

Note: Your user code and password are case sensitive (upper case, lower case). You must enter your existing user code using the correct case.

For practice, type your user code.

3. Type Your Password

Enter your password. This will initially have been provided by your Security Officer. If you have forgotten your password, please contact your Security Officer who will provide you with a new one. A password can be up to 14 alphanumeric characters long.

Note: For security purposes, your password is displayed as a series of asterisks.

Note: Your user code and password are case sensitive (upper case, lower case). You must enter your existing password using the correct case.

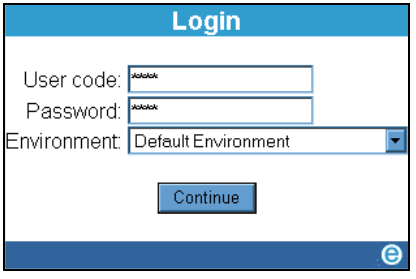
For practice, type your password.

4. Select an Environment

Select the environment you want to use. Typically your organization will have a live environment and a test environment.

For practice, select the Default option.

If you completed the Guided Practice, the results should look similar to the example that follows:

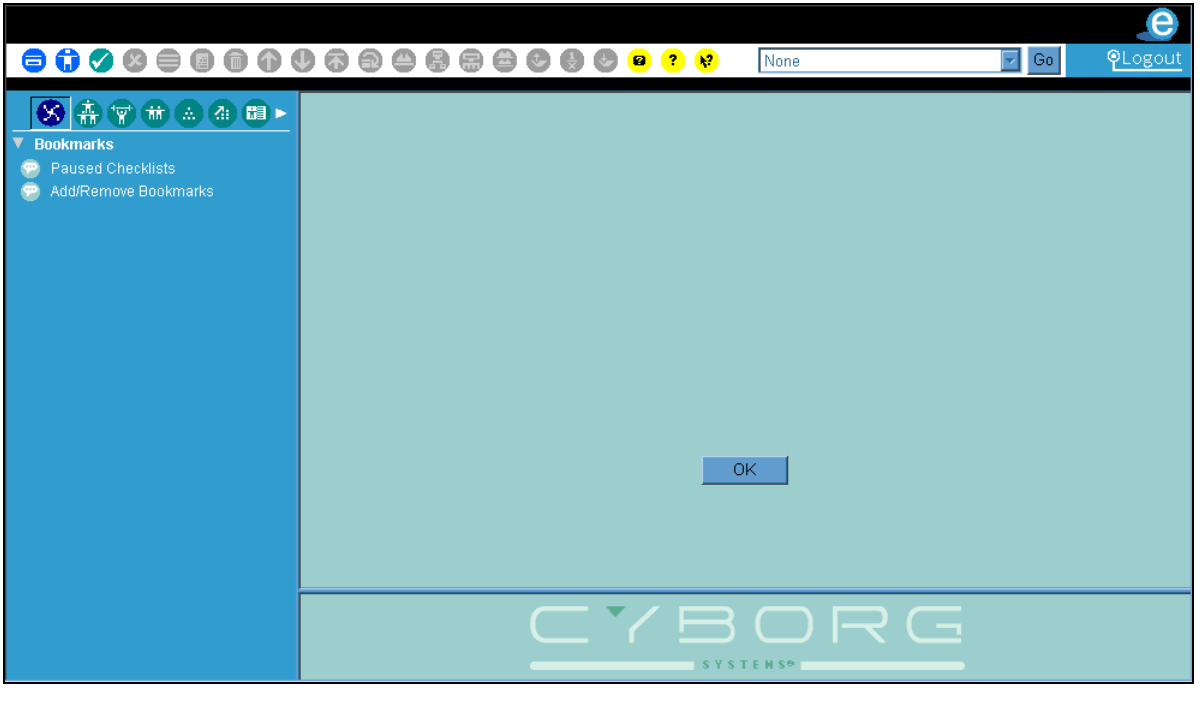


5. Click Continue

eCyborg will establish a connection to the server and verify your user code and password.

For practice, click Continue.

If you completed the Guided Practice, the results should look similar to the example that follows:



Note: If, in a previous session, you started to complete a checklist and paused the process, eCyborg will display the Paused Checklists dialog box the next time you log on.

See also:

- The process of logging on ***(on page 21)***

For more information on the log on process.

- Logging on with paused checklists ***(on page 24)***

For more information on paused checklists.

Changing your user code

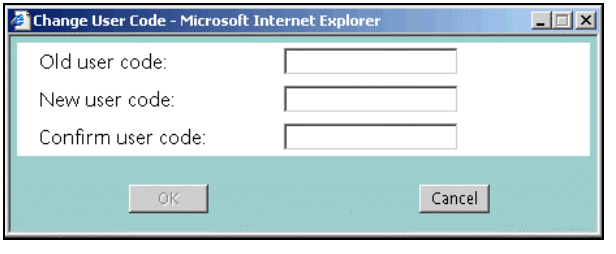
You can change your user code at any time, or eCyborg may be set up to prompt you to change your user code on a periodic basis. You enter your user code when you log on. To change your user code, complete these steps:

1. Access the Change User Code dialog box

Access this dialog box by making the following selections on the Navigator:

Component: User Tools
Process: User Tools
Task: Change User Code

For practice, access the Change User Code dialog box.



2. Type your New user code

Type the new user code. A user code can be up to 18 alphanumeric characters long.

Note: You can enter your new user code using either case (upper or lower) or a mixture of both. However, the new user code will be case sensitive.

For practice, type your new user code.

3. Confirm your user code

Retype your user code in the Confirm user code text box.

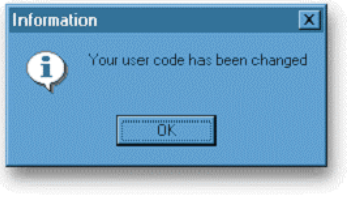
For practice, type your new user code in the Confirm user code text box..

4. Click OK

To change your user code, click OK.

For practice, click OK.

If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- Understanding user codes and passwords ***(on page 24)***

For more information on user codes.

Changing your password

You can change your password at any time. You enter your password when you log on. To change your password, complete these steps:

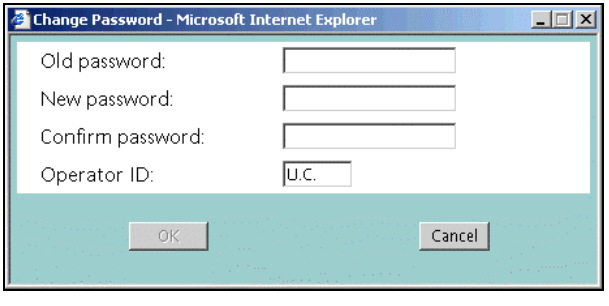
Note: Your organization may not allow you to change your password.

1. Access the Change Password dialog box

Access this dialog box by making the following selections on the Navigator:

Component:		User Tools
Process:		User Tools
Task:		Change Password

For practice, access the Change Password dialog box.



2. Type your Old password

Type your existing password in the Old password text box.

Note: Your password is case sensitive (upper case, lower case). You must enter your existing password using the correct case.

For practice, type your old password.

3. Type your New password

Type a new password. A password can be up to 14 alphanumeric characters long.

Note: You can enter your new password using either case (upper or lower) or a mixture of both.

For practice, type your new password.

4. Confirm your new password

Type your new password again.

To check that you have entered the correct new password, eCyborg will compare this entry with the entry you made in Step 3.

For practice, type your new password again in the Confirm password text box.

5. Operator ID

The Operator ID is assigned by your security officer and can not be changed. The Operator ID is used for audit purposes and is shown on this dialog box for display purposes only.

For practice, do not alter this field.

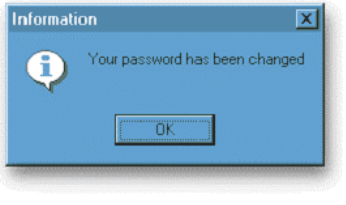
6. Click OK

If the entries you made in Steps 3 and 4 match, your password will be changed and a confirmation dialog will be shown.

If the entries you made in Steps 3 and 4 do not match, an error message displays. You will need to repeat Steps 3 and 4.

For practice, click OK.

If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- Understanding user codes and passwords ***(on page 24)***

For more information on passwords.

Logging out of eCyborg

To log out of eCyborg, follow this step:

Click the Logout button

Click the Logout button.

Note: *Do not log out from eCyborg by simply closing your browser window as your session will still remain active.*

For practice, click the Logout button.

See also

- Logging out ***(on page 26)***

For more information on the logout process.

Review of Questions Answered

1. What information must you have before you can log on?

2. How can user codes and passwords be used as part of your organization's security strategy?

3. How do you log out of the system?

PART 2

Working with eCyborg

In This Section

CHAPTER 4

Exploring the Work Area

In This Chapter

Introduction

This section introduces you to eCyborg interface. We refer to the interface as your Work Area. Your Work Area contains all the navigation methods and tools that you need to interact with the administrative solutions. The forms and dialog boxes that you need to enter data into are all displayed in the Work Area.

Prerequisites

Before you can complete the task in this section you must log on to eCyborg.

☞ *Refer to* **Getting Started** *(on page 19) for more information on how to log on to eCyborg.*

Questions answered

The following questions are answered in this section:

1. What is the Work Area?
2. What is the Navigator?
3. What is the Form area?
4. What is the Message area?
5. What is a user profile?

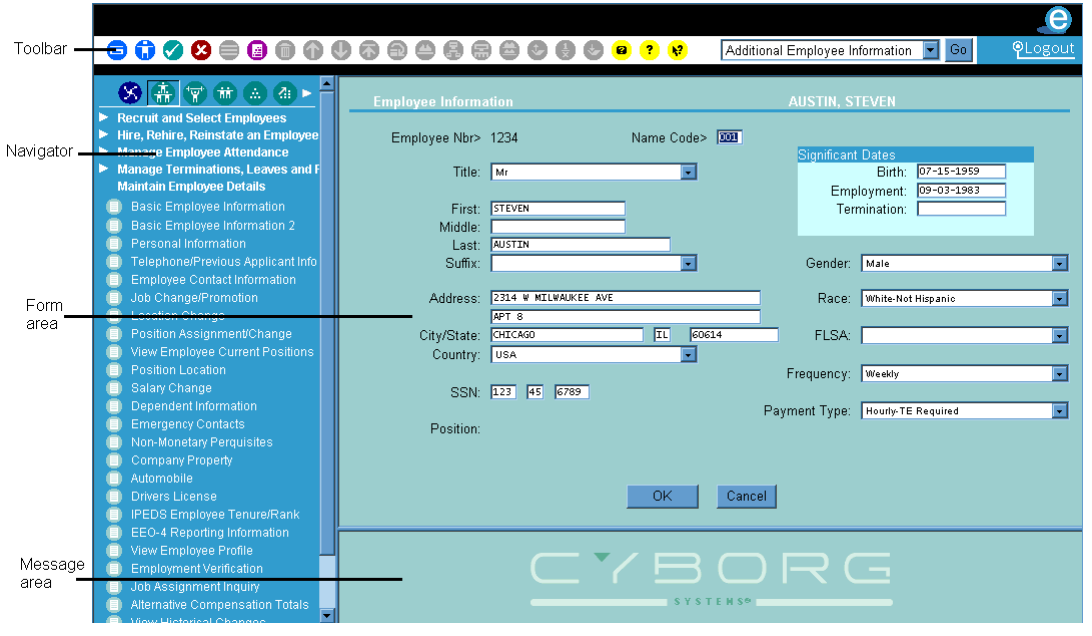
What is in the Work Area

The Work Area describes the entire display area that you see after you log on. The Work Area can be tailored to meet the needs of your organization and your personal work style. When you log on, the Work Area should look similar to this:

The Work Area can be broken down into four distinct areas:

- The Toolbar
- Navigator
- Form area
- Message area

This is illustrated in the following figure:


Toolbar
Navigator
Form area
Message area
Additional Employee Information
Go
Logout
Recruit and Select Employees
Hire, Rehire, Reinstate an Employee
Manage Employee Attendance
Manage Terminations, Leaves and F
Maintain Employee Details
Basic Employee Information
Basic Employee Information 2
Personal Information
Telephone/Previous Applicant Info
Employee Contact Information
Job Change/Promotion
Position Assignment/Change
View Employee Current Positions
Position Location
Salary Change
Dependent Information
Emergency Contacts
Non-Monetary Perquisites
Company Property
Automobile
Drivers License
IPEDS Employee Tenure/Rank
EEO-4 Reporting Information
View Employee Profile
Employment Verification
Job Assignment Inquiry
Alternative Compensation Totals
Employee Information
AUSTIN, STEVEN
Employee Nbr> 1234
Name Code> DOL
Title: Mr
First: STEVEN
Middle:
Last: AUSTIN
Suffix:
Address: 2314 W MILWAUKEE AVE
APT 8
City/State: CHICAGO IL 60614
Country: USA
SSN: 123 45 6789
Position:
Significant Dates
Birth: 07-15-1959
Employment: 09-03-1983
Termination:
Gender: Male
Race: White-Not Hispanic
FLSA:
Frequency: Weekly
Payment Type: Hourly-TE Required
OK
Cancel
CYBORG
SYSTEMS

The toolbar

The following buttons are included on the toolbar:

Button	Caption	Description
	Enter Command	Display the Command Entry dialog
	Change Employee	Select an Employee or Organization
	Save	Save this Form
	Cancel	Cancel this Form
	Select	Show selection list in the message area
	Clear Fields	Clear all the text boxes on this form
	Delete This Entry	Delete the current record from the database
	Up Selection List	Move up to the next selection in the message area
	Down Selection List	Move down to the next selection in the message area
	Top of Selection List	Move up to the top of the selection list
	Refresh Selection List	Refresh the selection list
	Job	The action associated with this button depends on where you are in Position Administration
	Organization List	The action associated with this button depends on where you are in Position Administration
	Position	The action associated with this button depends on where you are in Position Administration
	Incumbent	Used to 'drill down' from Position level forms. Access incumbents associated with the positions
	Restore Data	Restores you to the Online Pay Calculation form (PAY-CP) after processing a 'What If' or an 'Update'

Button	Caption	Description
	What-If Mode	Allows you to view calculated data without updating the employee record
	Update Mode	Updates the employee's record by applying the calculated pay information
	Help Menu	Access help for all of eCyborg components
	Help on This Form	Shows Help for the selected form
	What's This?	Shows help for a text box or option list
	Logout	Log out from eCyborg
	What-if mode	Displays when in What-if mode

☞ *Refer to* **Navigating the System** *(on page 49) for more information on using these buttons.*

Navigator

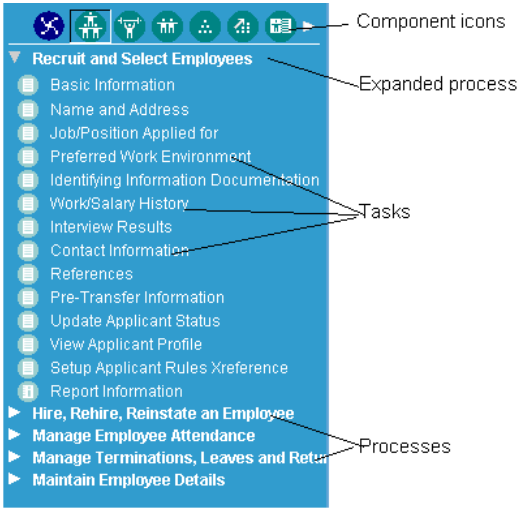
The Navigator provides an easy way to navigate the system. It uses a three-level navigation format that is composed of the following:

- Components
- The Processes associated with components
- The Tasks associated with a process

To navigate the system using the Navigator, you must first select the correct component. Each component of the system is represented by an icon.

If you are unsure of the meaning of an icon, you can place the pointer over the icon and the ToolTip will display the component name:

To navigate through the different components, you must click the arrows at the ends of the Component bar. When the component you are looking for is in view, click its icon to display the processes for that component.



After you select a component, you then select a process. A process is used to categorize a group of related tasks. After you select a process, you can then select a task.

Each task is represented by an icon and a description. Each icon indicates the type of task associated with it. The task icons include the following:

Icon	Description
	Checklist
	Dialog Box
	Form
	Report

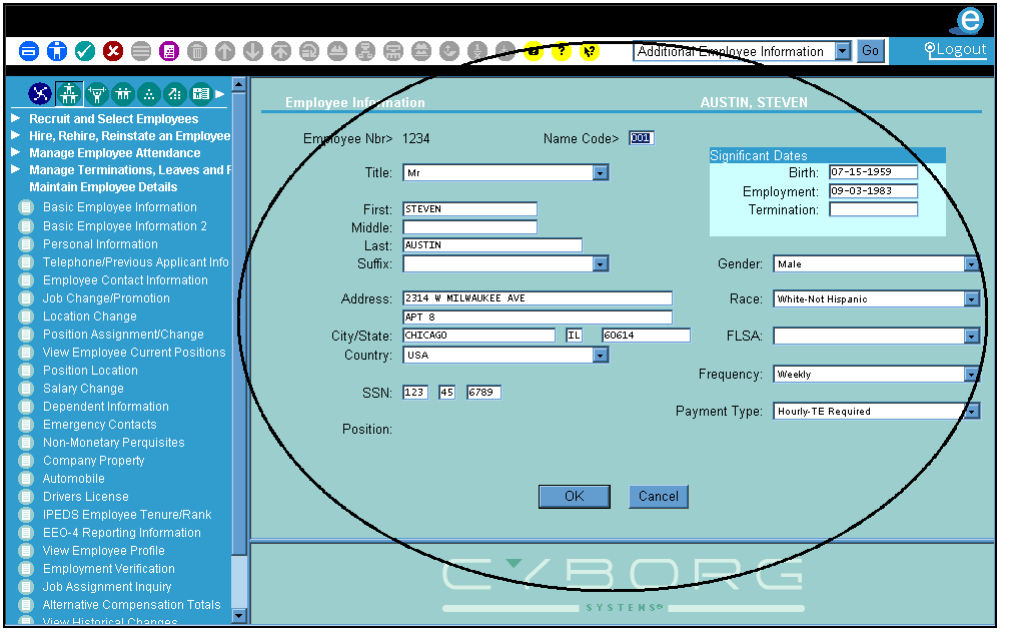
When you select a task, the associated item (form, dialog, and so forth) is displayed in the Form area.

☞ *Refer to* **Navigating the System** *(on page 49) for more information on the Navigator.*

☞ *Refer to* **Working with Data** *(on page 115) for more information on completing tasks.*

Form area

When you select a form, the form will be displayed in the Form area:



Note: *When you log on to eCyborg, the Form area will be blank.*

When you enter data on a form, you can use the Save or Cancel buttons on the toolbar to save or cancel the information. It is good practice to clear data from the form or table before entering new data. To create a blank form, use the Clear Fields button. This button removes any data from the text boxes, but does not delete the record. If you need to delete the record, use the Delete button.

Note: *If you are unsure which are the correct buttons, hover the pointer over the buttons on the toolbar to see the ToolTip giving the name of the button.*

☞ *Refer to* **Working with Data** *(on page 115) for more information on using forms.*

Message area

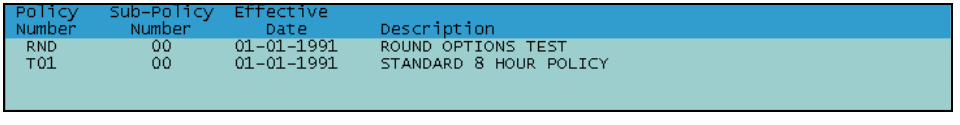
The Message area is used to display two types of information.

First, it is used to display information, warnings, and reject messages in response to data that you have entered on the form.

☞ *Refer to* **System messages** *(on page 137) for more information on system messages.*

Second, it displays a selection list for forms that have multiple occurrences of the same type of information. You can use a selection list to choose the record that includes the information you want to work with.

The following example shows a Selection list for the Policy Master form (PT1SCR) used in the Time and Attendance system.



Effect of your user profile

A user profile is created and maintained for you by a Security Officer. Each user has a user profile. A user profile is used for security purposes to determine what you can and cannot do while you are using the system and which parts of the system you can access.

For example, confidential information such as salary details are usually accessible only to users in your organization's payroll department. Typically, users who do not work in the payroll department would not receive access to the Salary Administration component.

Review of Questions Answered

1. What is the Work Area?

2. What is the Navigator?

3. What is the Form area?

4. What is the Message area?

5. What is a user profile?

CHAPTER 5

Navigating the System

In This Chapter

Introduction

The Work Area is where you begin to interact with eCyborg. This section introduces you to the different navigation methods and tools designed to help you gain the most from eCyborg.

Tasks

This section explains the following tasks:

- Using the Navigator
- Switching between forms
- Accessing a checklist
- Pausing a checklist
- Resuming a paused checklist
- Changing to a different employee or organization
- Displaying a list of organizations

Prerequisites

Before you can complete the tasks in this section, you must log on to eCyborg.

☞ *Refer to* **Getting Started** *(on page 19) for more information on how to log on to eCyborg.*

☞ *Refer to* **Exploring the Work Area** *(on page 37) for more information on using the work area.*

Questions answered

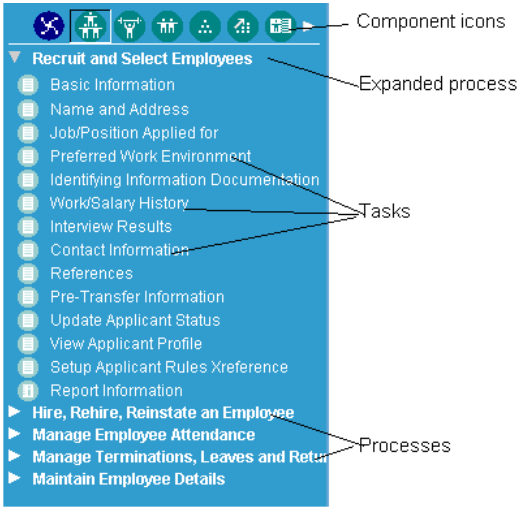
The following questions are answered in this section:

1. How is the Navigator organized?
2. What effect does your user profile have on information you can access?
3. How would you switch between forms?
4. What are checklists?
5. What method is provided to allow the selection of a different employee?

The Navigator

The Navigator provides the means for navigating the system. The Navigator is positioned on the left side of the Work Area. The Navigator is made up of these three levels:

- Components
- Processes—each process is associated with a component
- Tasks—each task is associated with a process



By selecting the different items on these levels, you navigate to the item (form, dialog box, checklist and so forth) that you need.

Note: *The Navigator may only be controlled with the mouse.*

Components

To navigate the system using the Navigator, you must first select the correct component. Each component in the system is represented by an icon.

Your user profile will determine the components to which you have access. The component bar can display a limited number of component icons. If you have access to more than can be displayed, you will need to use the arrows on the Component bar to navigate to them. Click the arrow at either end of the Component bar to navigate to the different components.

When the component you are looking for is displayed, you must click its icon to display the processes associated with that component.

☞ *Refer to* **Working with Data** *(on page 115) for more information on how to select components using the Navigator.*

Note: Your user profile determines which components you can access—you may not have access to all of the components shown here.

Bookmarks

The first icon in the components bar on the Navigator is for Bookmarks:

Component on the Navigator	Description
	Bookmarks

☞ *Refer to* **Using bookmarks** *(on page 56) for more information on bookmarks.*

The HR application

The HR application consists of the following components that can be accessed from the Navigator:

Component on the Navigator	Description
	Employee Resourcing
	Employee Development
	Employee Relations
	Employee Compensation
	Salary Administration
	HR Setup
	Position Administration
	Requisition Tracking
	Training Administration

The Benefits application

The Benefits application consists of the following components that can be accessed from the Navigator:

Component on the Navigator	Description
	Health Welfare Plan Enrollment/Maint
	Deferred Plan Enrollment/Maintenance

Component on the Navigator	Description
	Flex Plan Enrollment/Processing
	Benefit Plan Setup and Maintenance

The Payroll application

The Payroll application consists of the following components that can be accessed from the Navigator:

Component on the Navigator	Description
	Employee Payroll
	Payroll Setup Processing
	Payroll Year end

The Time and Attendance application

The Time and Attendance application consists of the following component that can be accessed from the Navigator:

Component on the Navigator	Description
	Time and Attendance

Processes

After you select a component, you must then select a Process. A Process is used to categorize the different tasks within a component. When you first log on to eCyborg the Processes are displayed at the top of the Navigator. When you click a collapsed Process, it expands to reveal its tasks.

Note: *Some components have only one Process.*

☞ *Refer to* **Working with Data** *(on page 115) for more information on how to select and use Processes.*

Tasks

Each task is represented by an icon and a description of the task. The icon associated with each task indicates the type of task. The task icons include the following:

Icon	Description
	Checklist
	Dialog Box
	Form

Icon	Description
	Report

When you select a task, the associated item is displayed in the Form area.

☞ *Refer to* **Working with Data** *(on page 115) for more information on how to select a task.*

See also:

- Using the Navigator ***(on page 65)***

For detailed directions on using the Navigator.

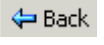
Back and Forward buttons

You can use your browser's Back and Forward buttons as a quick way to switch between forms that you have accessed in a session.

Note: *How these buttons display and work would largely depend on your browser, but should be similar to the functionality described here.*

Note: *The examples shown here are from the Microsoft Internet Explorer browser.*

After you have accessed two or more forms, the Back button is enabled.



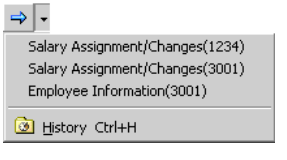
The Back button provides a quick way to switch to an earlier form in the list for a specific employee. Once you click the Back button, the Forward button is enabled.

You can use the Forward button to move forward through the list. When you reach the end of the list, the appropriate button will be disabled.

You can also use the Back and Forward drop-down buttons to recall forms that you have used.

Clicking one of the drop-down buttons will display a list of forms accessed in this session. The form name and employee number is displayed on the list. You can directly select the form you want to recall rather than paging through the forms one-by-one.

Following is an example of the list displayed from the Forward drop-down button:



See also:

- Switching between forms one-by-one ***(on page 68)***
- Switching between forms by selection ***(on page 70)***

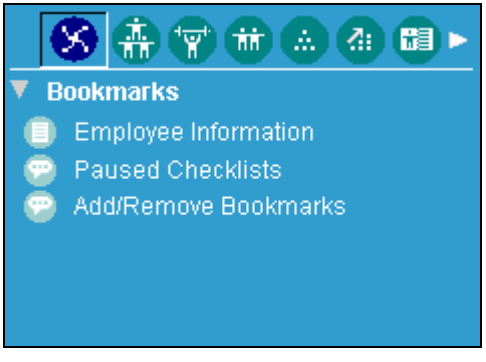
For detailed directions on changing forms.

Using Bookmarks

You use forms and checklists to perform various tasks when using the administrative solutions. Each task, such as updating an employee's address, uses a specific form. You can easily access all of the various forms using the Navigator. Bookmarks give you quick access to the forms that you use most often.

Bookmarks show up as tasks in the Navigator under the Bookmarks process.

When you create a bookmark, it is immediately added to the Bookmarks section of the Navigator. In the example below, the Employee Information form (EF-SCR) has been added to the list of Bookmarks:



You can access a form using a bookmark by selecting it directly from the list of Bookmarks in the Navigator.

See also:

- Adding a bookmark ***(on page 75)***
- Accessing a bookmark ***(on page 77)***

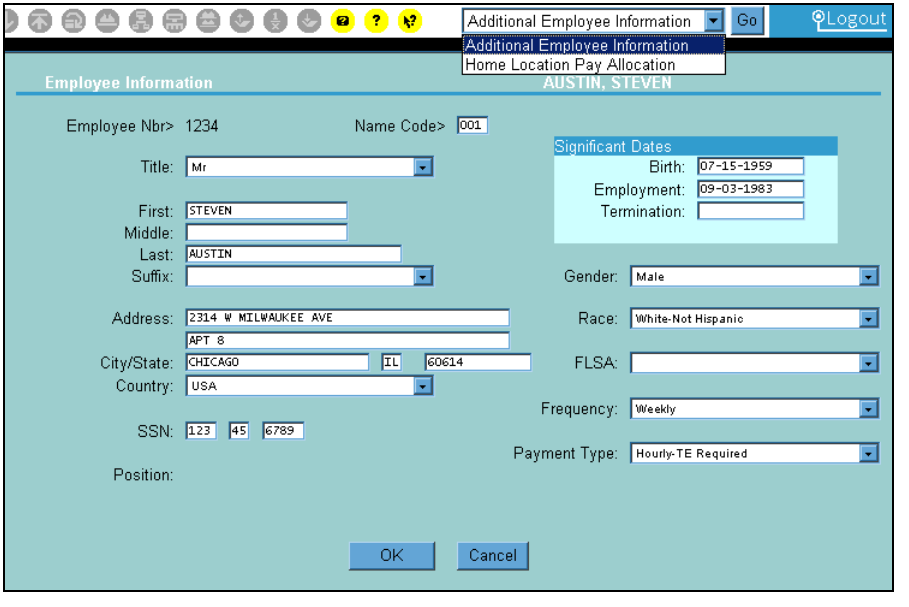
For detailed directions on adding and accessing bookmarks.

Related forms

If there are any additional forms related to a particular form, they will be in the drop-down list in the toolbar.

You could use this list to navigate to related forms. In the following example, you could navigate to the following forms:

- Additional Employee/Payroll Information form (EG-SCR)
- Payroll Home Location/Pay Allocations form (GG-SCR)



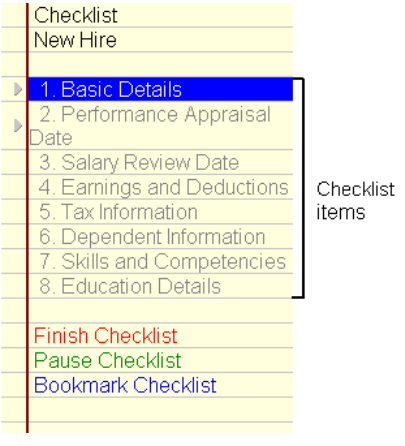
See also:

- Moving to a related form ***(on page 73)***

For detailed directions on using the drop-down list to navigate to another form.

Understanding checklists

A checklist provides a way to link different items (forms, dialog boxes, checklists, and report groups) to create a workflow. Each of these items can then be completed consecutively, using the checklist to navigate them. For example, eCyborg is delivered with a checklist called 'New Hire'. This checklist contains all the items that need to be completed in order to add a new employee to the system, and optional information you might want to add.



Checklists eliminate the need to navigate to individual items. They also ensure that all the items that are part of a workflow are presented for completion. When you access a checklist, you are presented with a list of items in the sequence in which they should be completed.

☞ *Refer to the Optimizing System Features documentation for more detailed information on using checklists to design a business process.*

See also:

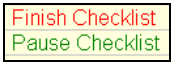
- Accessing a checklist ***(on page 77)***

For detailed directions on accessing a checklist.

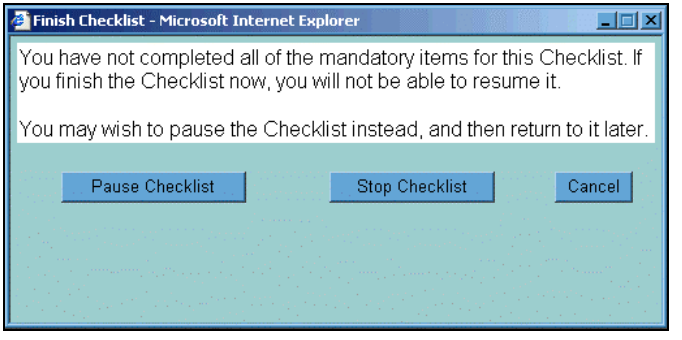
Working through a checklist

When you complete an item in a checklist, you can click the next item in the checklist. When you click the next item, the system will check the record and save it. If the record cannot be saved, the appropriate message (Reject, Warning, Information) will display in the Message area.

When you complete the mandatory items in a checklist, you can click Finish Checklist or Pause Checklist.



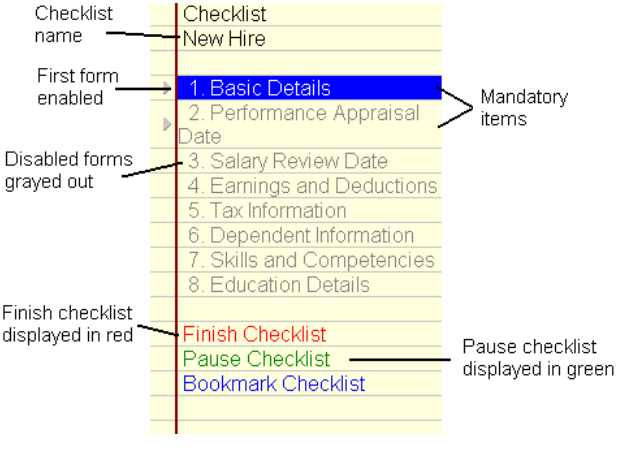
If you have not completed the mandatory items in a checklist when you click Finish Checklist, you will see a warning dialog, giving you the option to pause the checklist:



Checklist symbols

When you use a checklist, you need to be aware of what the symbol next to each item on the checklist means.

Items in a checklist can be mandatory or optional. A mandatory item must be completed before the next checklist item can be accessed. A mandatory item is displayed with a gray triangle next to it. In the New Hire checklist shown next, the first two items are mandatory:



Until the mandatory items are completed, optional items are displayed in gray and are not accessible. After the mandatory items are completed, the optional items will be enabled. Their color will be changed to black.

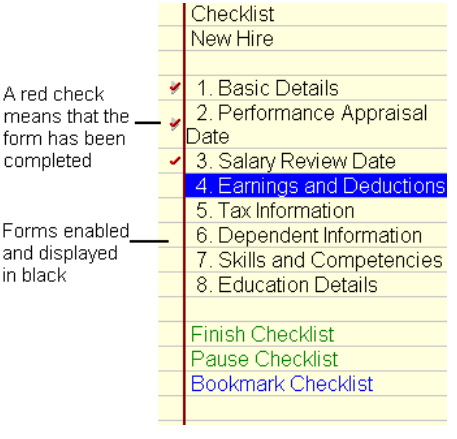
Until the mandatory steps are complete, the Finish Checklist control will be displayed in red or not available, depending on checklist options. The Finish Checklist control is displayed in green when all mandatory steps have been completed. The 'Pause Checklist' item is displayed in green.

Note: *If the Finish Checklist control is available (displayed in red), the checklist can be stopped even though all mandatory steps have not been completed. Stopping a checklist, however, cancels all further processing.*

The next example shows the 'New Hire' checklist after the first three items have been completed. When an item is completed, a red check or tick is displayed next to it. Note that the Finish Checklist item is now showing as green text, showing you that you can now stop the checklist at any point.

When you complete the mandatory items in a checklist, you can click one of the following checklist controls:

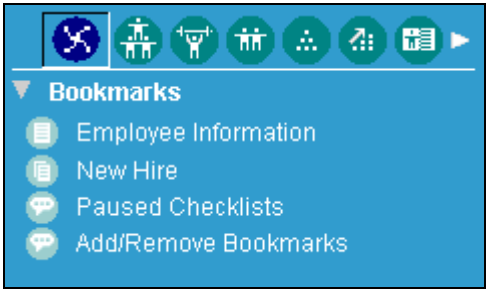
- Pause Checklist—to pause the checklist and return to it at a later date.
- Finish Checklist—to finish the checklist and complete the process.



The next example shows the 'New Hire' checklist with all the items completed:

Bookmark a checklist

You can save the current checklist as a bookmark by clicking the Bookmark Checklist option. This adds the checklist to your list of bookmarks in the Navigator. The following example shows the New Hire checklist as a bookmark:



See also

- Accessing a bookmark ***(on page 77)***

For detailed direction on accessing bookmarks.

Resume a paused checklist

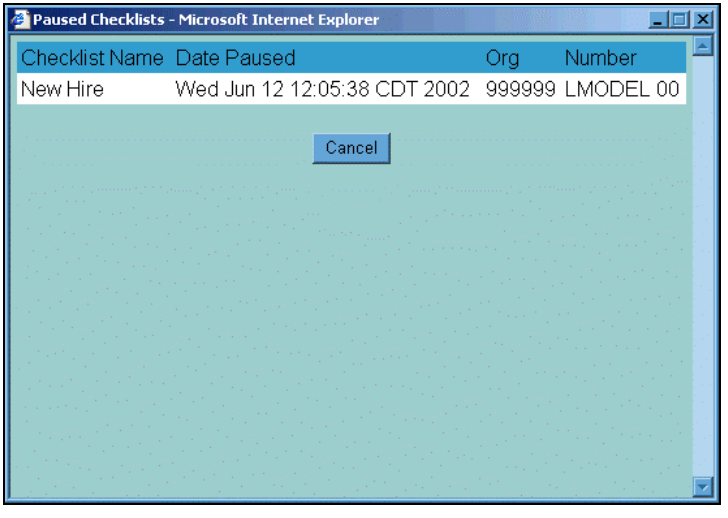
You can pause a checklist for a number of reasons. For example, if you are using the New Hire checklist and you do not have the employee's birth date, you could pause the checklist and complete it at a later date when you have the information.

A paused checklist can be accessed in one of the following two ways:

- When you log on
- From the Navigator

When you log on

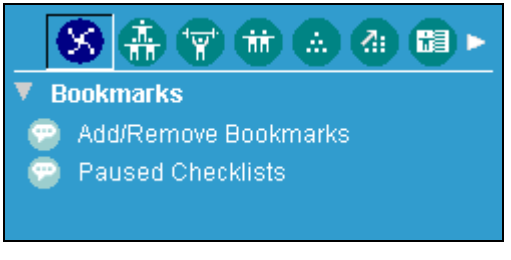
If you have paused checklists on the system, the Paused Checklists dialog box will be displayed the next time you log on:



Click on a checklist to resume it, or click Cancel if you do not wish to proceed with this checklist at this time. It will still remain as a paused checklist and can be resumed at a later time.

From the Navigator

Another way to access a paused checklist is to click the Paused Checklists option from the Navigator to access the Resume A Checklist dialog box.



See also:

- Pausing a checklist ***(on page 80)***

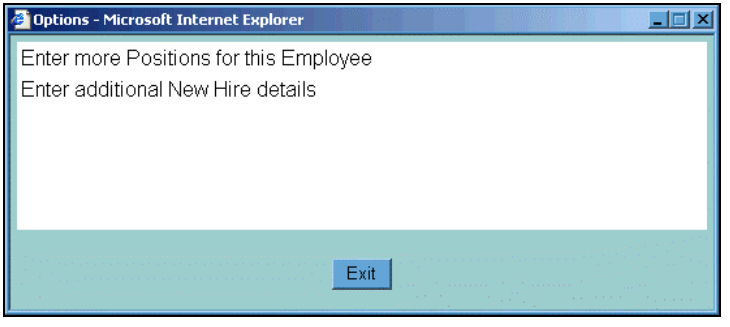
For detailed directions on pausing a checklist.

- Resuming a paused checklist ***(on page 81)***

For detailed directions on resuming a paused checklist.

Finishing a checklist

When you complete a checklist click Finish Checklist. An Options dialog may appear suggesting other actions you could take. Select one of the options to continue, or click Exit.

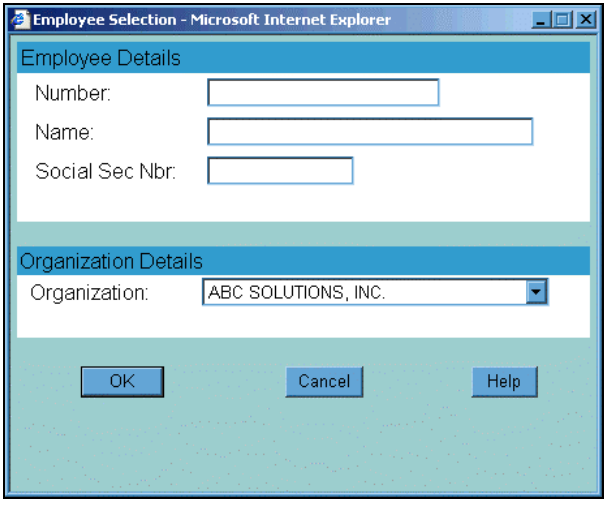


Switching between different employees and organizations

If you have more than one organization established on your system, you will need to be able to switch between these organizations easily and quickly. Within these organizations, you will also need to switch between different employees just as easily.

For example, if you need to enter salary information for a number of employees, you will want to be able to switch employees after you complete a Salary Assignment/Changes form (40-SCR) for each of them.

To switch between organizations and employees, you use the Employee Selection dialog box:



To access this dialog box, click the Change Employee button on the toolbar.

See also:

- Changing to a different employee or organization ***(on page 83)***

For detailed directions on selecting a different employee or organization.

- Displaying a list of organizations ***(on page 84)***

For detailed directions on displaying a list of organizations.

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Completing the Guided Practice

In this task you are going to access the Training Administration component and select the Setup and Maintain Courses process.

Using the Navigator

The Navigator is made up of these three levels:

- Components
- Processes—each process is associated with a component
- Tasks—each task is associated with a process

To use the Navigator to access a Task, complete the following steps:

1. Access a Component icon

Not all of the component icons are on display at once. To display a Component icon, you may need to navigate to it by clicking the arrows on the Component bar.

For practice, click the right arrow on the Component bar until the Training Administration icon is displayed.

2. Click the Component icon

To access the Processes, click the Component icon.

For practice, click the Training Administration Component icon.

If you completed the Guided Practice, the results should look similar to the example that follows:

3. Click a closed Process

To view the tasks associated with a closed Process, click it. The Process will expand to display the tasks associated with it.

For practice, click the Process 'Setup and Maintain Courses'.

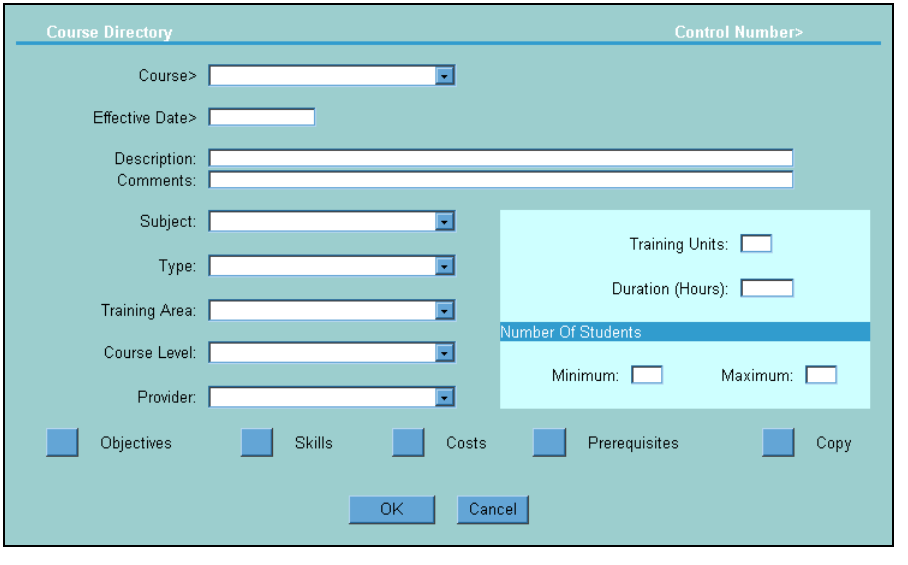
If you completed the Guided Practice, the results should look similar to the example that follows:

4. Click a task

To access a task, click the task icon.

For practice, click the task 'Setup/Maintain Course'.

If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- The Navigator ***(on page 51)***

For more information on using the Navigator.

- Components ***(on page 51)***

For more information on Components.

- Tasks ***(on page 53)***

For more information on Tasks.

Switching between forms one-by-one

The Back and Forward buttons on your browser's toolbar enable you to switch between forms that you have accessed previously in a session. This means that you can use the Back and Forward buttons to move quickly between forms and tables that you use repeatedly.

For example, you may want to copy information such as address details from one form to another. The Back and Forward buttons are a quicker way of moving between these two forms.

Note: The Back and Forward buttons of your browser may not function precisely as described in this task. Refer to your browser's documentation for further details that are specific to your browser.

Note: The Back and Forward buttons may only be enabled when you have accessed two or more forms.

There are two ways that you can switch back and forth between forms:

- Switching between forms one-by-one (this task)
- ***Switching between forms by selection*** (on page 70)

This task explains how to switch between forms one-by-one.

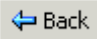
To complete this task you must first access the forms listed below for Employee Number '1234' by making the following selections from the Navigator.

Component:	Employee Resourcing
Process:	Maintain Basic Employee Details
Task:	Basic Employee Information
Component:	Employee Resourcing
Process:	Maintain Basic Employee Details
Task:	Personal Information
Component:	Employee Resourcing
Process:	Maintain Basic Employee Details
Task:	Telephone/Previous Applicant info
Component:	Employee Resourcing
Process:	Maintain Basic Employee Details
Task:	Dependent Information

To switch between forms one-by-one complete these steps:

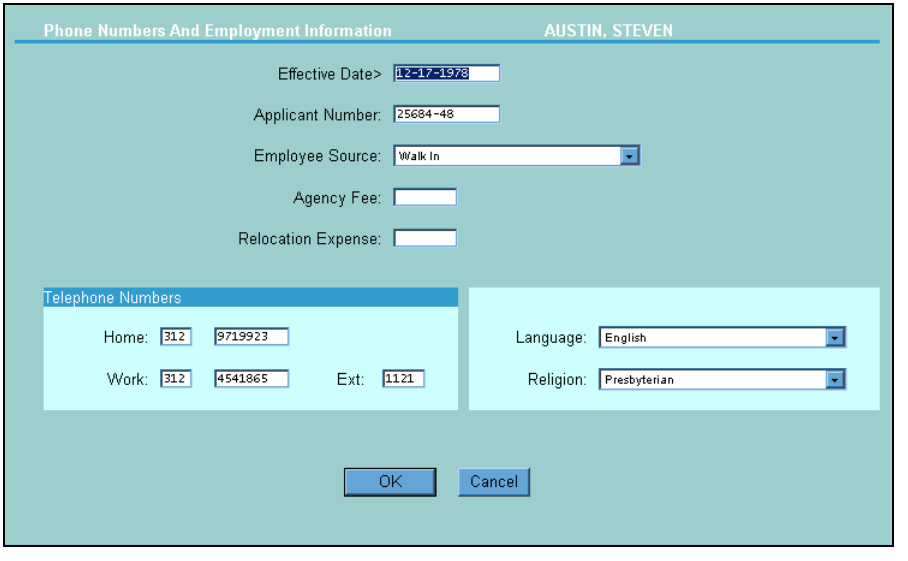
1. Click Back

Click the Back button on your browser's toolbar to access a form you have previously accessed.



The Back button will be disabled when you reach the first form you accessed in a session.

For practice, click the Back button to access the Phone Numbers and Employment Information form (03-SCR).

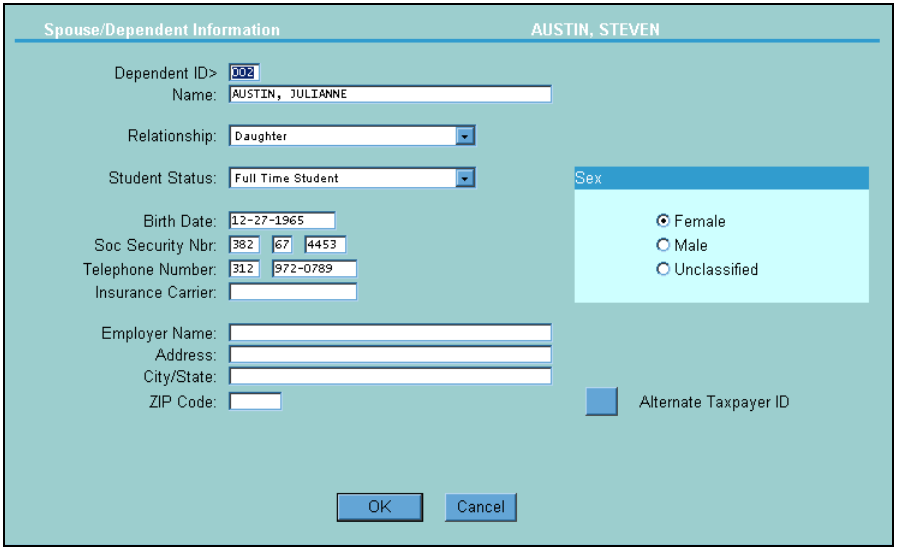


2. Click Forward

To move forward one-by-one through the forms you have accessed, use the Forward button on the Standard toolbar.

The Forward button will be disabled when you reach the last form you accessed in a session.

For practice, click the Forward button to access the Spouse/Dependent Information form (10-SCR).



See also:

- Back and Forward buttons ***(on page 55)***

For more information on switching between forms.

Switching between forms by selection

You can use your browser's Back and Forward buttons to switch between forms that you have accessed previously in a session. This means that you can use the Back and Forward buttons to move quickly between forms and tables that you use repeatedly.

For example, you may want to copy information such as address details from one form to another. The Back and Forward buttons are a quicker way of moving between these two forms.

Note: The Back and Forward buttons of your browser may not function precisely as described in this task. Refer to your browser's documentation for further details that are specific to your browser.

Note: The Back and Forward buttons are enabled only when you have accessed two or more forms.

There are two ways that you can switch back and forth between forms:

- ***Switching between forms one-by-one*** (on page 68)
- Switching between forms by selection (this task)

This task explains how to switch between forms by selection.

To complete this task you must first access the forms listed below for Employee Number '1234' by making the following selections from the Navigator.

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Basic Employee Information

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Personal Information

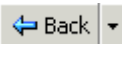
Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Telephone/Previous Applicant info

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Dependent Information

To switch between forms by selecting the form follow these steps:

1. Click the Back drop-down

Click the Back drop-down button on your browser's toolbar to access the list of forms you have previously accessed.



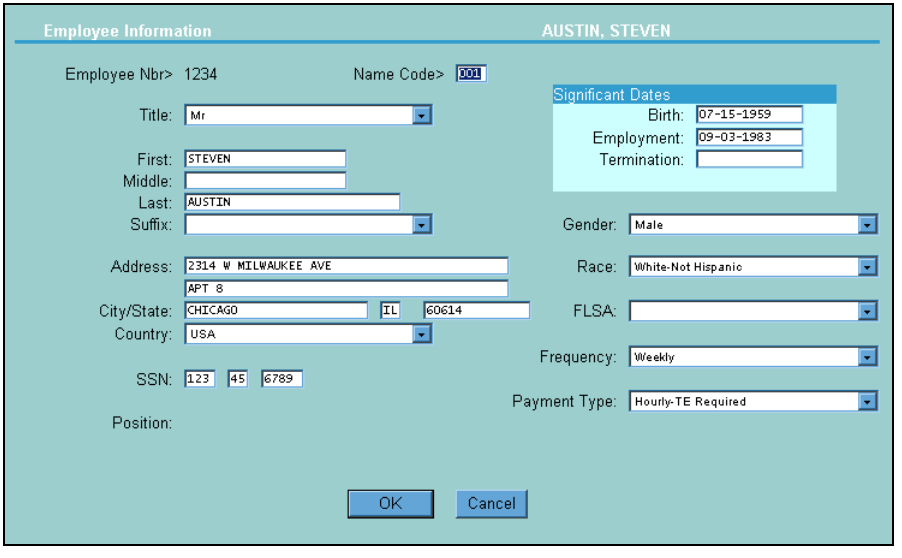
For practice, click the Back drop-down button.

2. Select a form

Select a form from the list by clicking on it.

Note: After you select one of the forms from the list, the list will be refreshed.

For practice, select the first form you accessed, Employee Information (EF-SCR).



3. Click the Forward drop-down

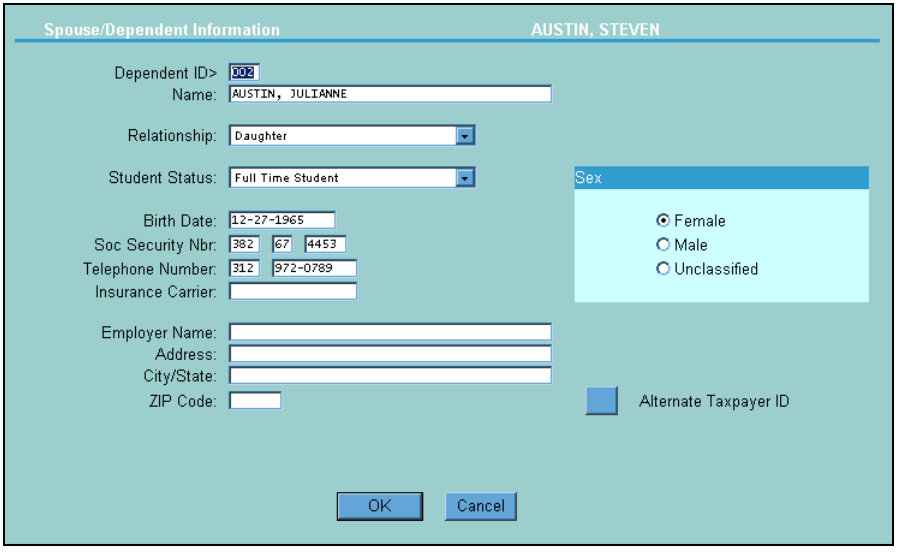
Click the Forward drop-down button on the Standard toolbar to access the list of forms you have accessed.

For practice, click the Forward drop-down button.

4. Select a form

Select a form from the list by clicking it.

For practice, select the Spouse/Dependent Information form (10-SCR).



See also:

■ Back and Forward buttons ***(on page 55)***

For more information on switching between forms.

Moving to a related form

This task explains how to navigate to a related form.

To complete this task you must first access the Employee Information form for Employee Number '1234' by making the following selections from the Navigator.

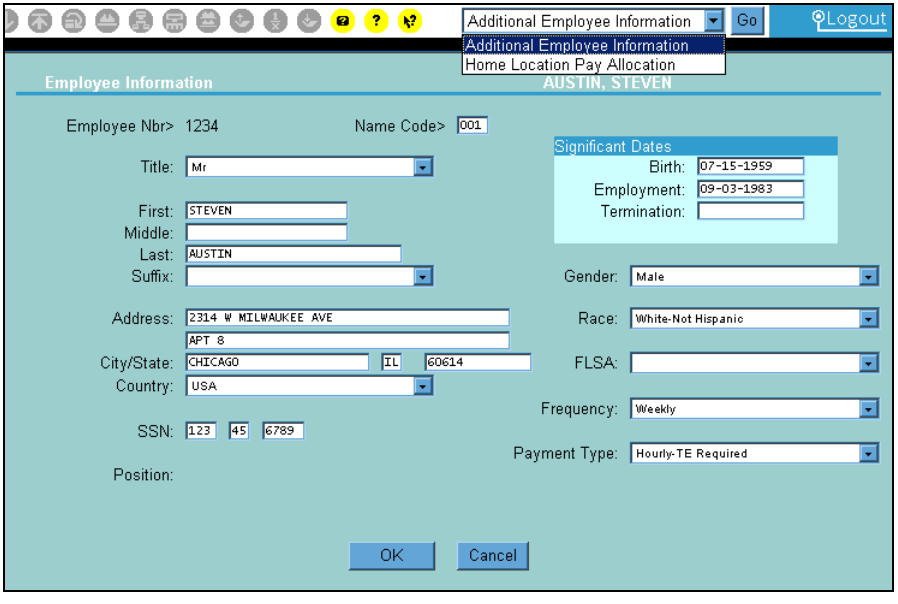
Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Basic Employee Information

1. Click on the selection list

Click the down arrow button beside the list box on the toolbar.

A list of forms related to the form with which you are currently working will display.

For practice, click the down arrow button beside the list box on the toolbar.



2. Select a form

To navigate to a related form, select one of the forms shown in the list.

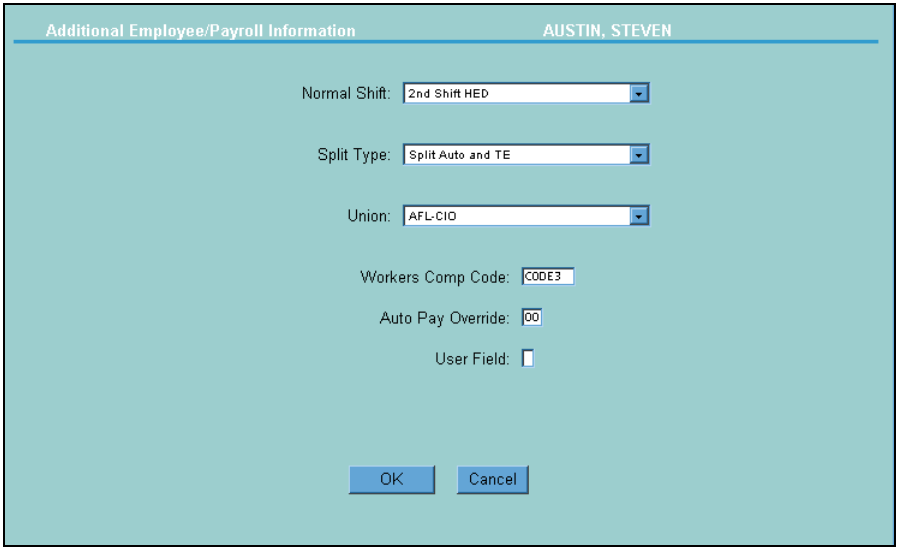
For practice, select 'Additional Employee Information' from the drop-down list.

3. Click Go

Click the Go button beside the drop-down list on the toolbar. The selected form will display in the Form Area.

For practice, click Go.

If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- Related forms ***(on page 57)***

For more information on related forms.

Adding a bookmark

To add a bookmark to your list of bookmarks on the Navigator, follow these steps:

1. Access the form

Access the form you would like to include as a bookmark.

For practice, access the Employee Information form (EF-SCR) for Employee Number '1234'.

Access this form by making the following selections from the Navigator:

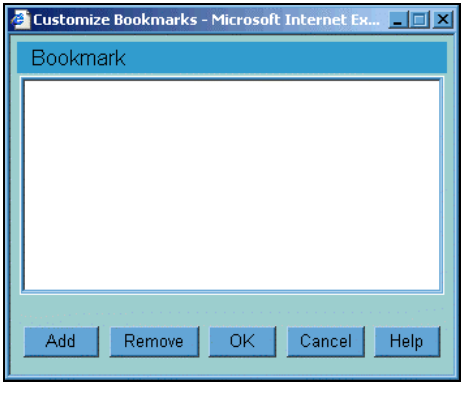
Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Basic Employee Information

2. Access the Customize Bookmarks dialog

Access this dialog by making the following selections from the Navigator:

Component: Bookmarks
Process: Bookmarks
Task: Add/Remove Bookmarks

For practice, access the Customize Bookmarks dialog.



3. Click Add

The form is added to the list in the dialog.

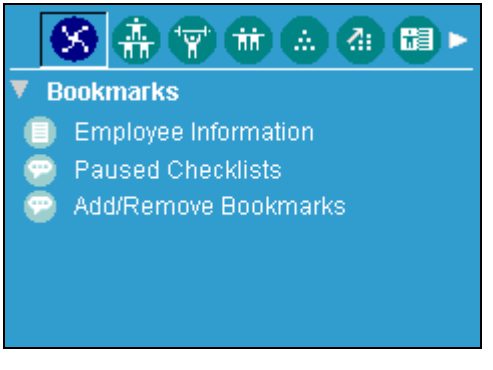
For practice, click Add.

4. Click OK

The dialog closes, and the form is added to the list of bookmarks in the Navigator.

For practice, click OK.

If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- Using bookmarks *(on page 56)*

For more information on bookmarks.

Accessing a bookmark

To complete this task, you must first complete the task ***Adding a bookmark*** (on page 75) to add a bookmark that you can access.

Access a Bookmark

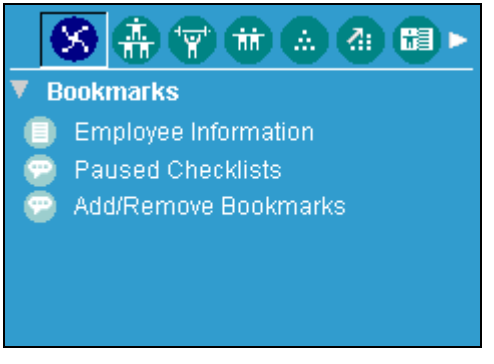
Access a bookmark that you have previously added to the list of bookmarks.

To access a bookmark make the following selections on the Navigator:

Component: Bookmarks
Process: Bookmarks

You will see your list of saved bookmarks in the Navigator.

For practice, access the bookmarks list.



See also:

- Using bookmarks *(on page 56)*

For more information on bookmarks.

Accessing a checklist

Checklists provide a way to link multiple items that you can access and work through using a list displayed in the Navigator. In this example you are going to access a checklist that is delivered with eCyborg.

1. Access a checklist

Access a checklist you want to use.

For practice, access the universal checklist 'Hire a New Employee'.

Access this checklist by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Hire, Rehire, Reinstate an Employee
Task: Hire a New Employee

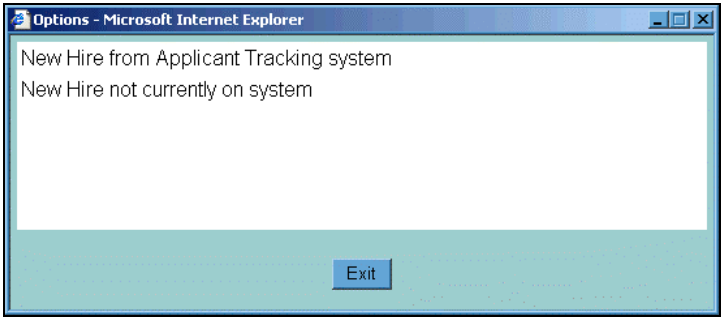
2. Select which checklist you want to use (optional)

In the Hire a New Employee checklist, there are two types of employees that you can hire. To proceed, you must select which type of employee you want to use. Skip this step if your checklist does not offer a similar option.

Select which type of employee you want to use:

- New Hire from Applicant Tracking system—if the employee's record has already been entered on the system.
- New Hire not currently on the system—if there is no existing record of the new employee.

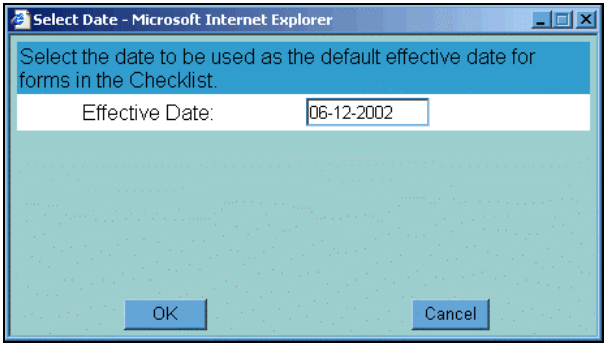
For practice, click 'New Hire from Applicant Tracking system'.



3. Enter date

On the Select Date dialog box, enter a default effective date for the forms in this checklist.

For practice, type today's date.



4. Click OK

Click OK on the Select Date dialog.

For practice, click OK.

5. Change employee (optional)

The first form of the checklist may open with the current employee. If you wish to change the employee, click the Change Employee button.

For practice, click Change Employee.

6. Enter a Number, Name or Social Sec Nbr

Enter the employee number, name, or Social Sec Nbr of the applicant you want to create as a new employee.

For practice, type 'BENTKOWSKI, TIMOTHY' in the Name text box.

7. Select an Organization

In the Organization option list, select the organization in which you want to create the new employee.

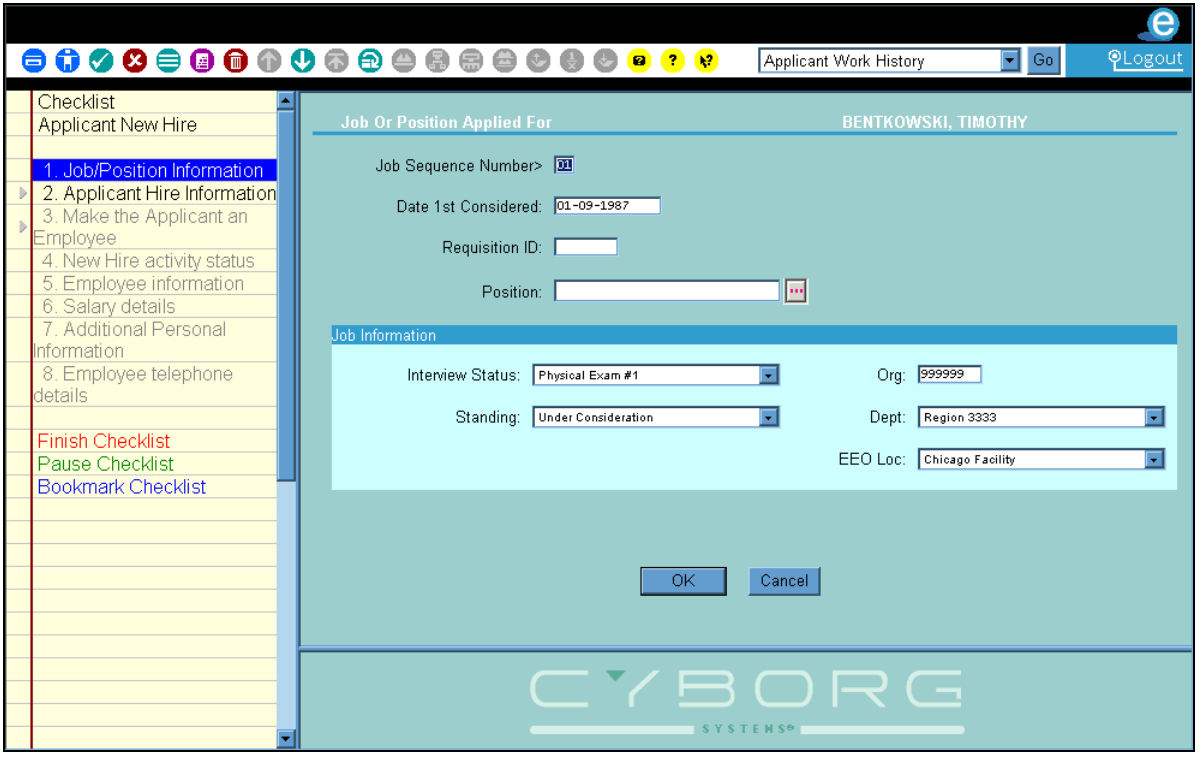
For practice, select 'Acme Manufacturing'.

8. Click OK

Click OK to access the checklist.

For practice, click OK.

If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- Understanding checklists *(on page 58)*

For more information on checklists.

Pausing a checklist

When you have accessed a checklist, you can pause it at any time. You may need to do this if you discover that you do not have the necessary information to complete the checklist items.

To complete the Guided Practice in this task, you need to have completed the Guided Practice in the task ***Accessing a checklist*** (on page 77).

Click the Pause Checklist control

To pause the checklist, click the Pause Checklist control on the Navigator:

For practice, click the Pause Checklist item.

See also

- Understanding checklists ***(on page 58)***

For more information on checklists.

Resuming a paused checklist

To resume a paused checklist, you use the Resume A Checklist dialog box. This dialog box can be accessed in one of two ways:

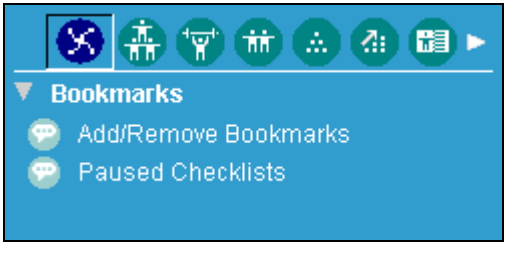
- When you log on to eCyborg
- From the Navigator

In this example, you access the Resume A Checklist dialog box from the Navigator.

To complete the Guided Practice in this task, you need to have completed the Guided Practice in the task ***Pausing a checklist*** (on page 80).

1. Access the Resume A Checklist dialog box

Click the Paused checklists option in the navigator to access the Resume A Checklist dialog box.



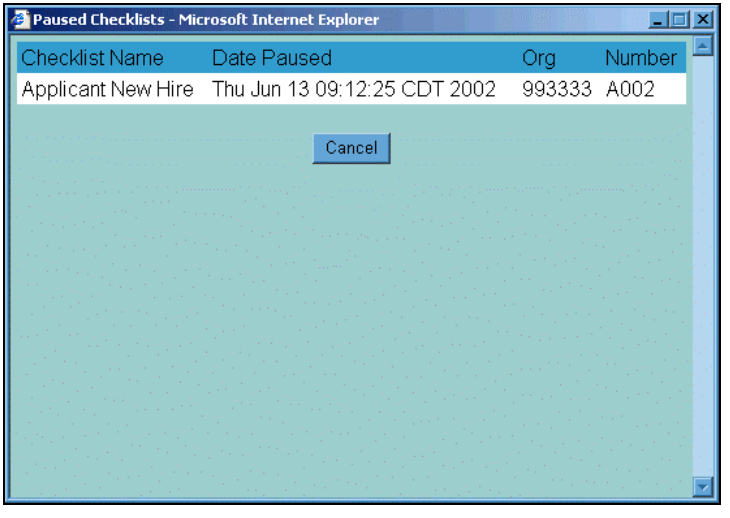
Note: The Resume A Checklist dialog box can also be displayed when you log on to eCyborg if you had previously paused a checklist.

For practice, click the 'Paused checklists' option.

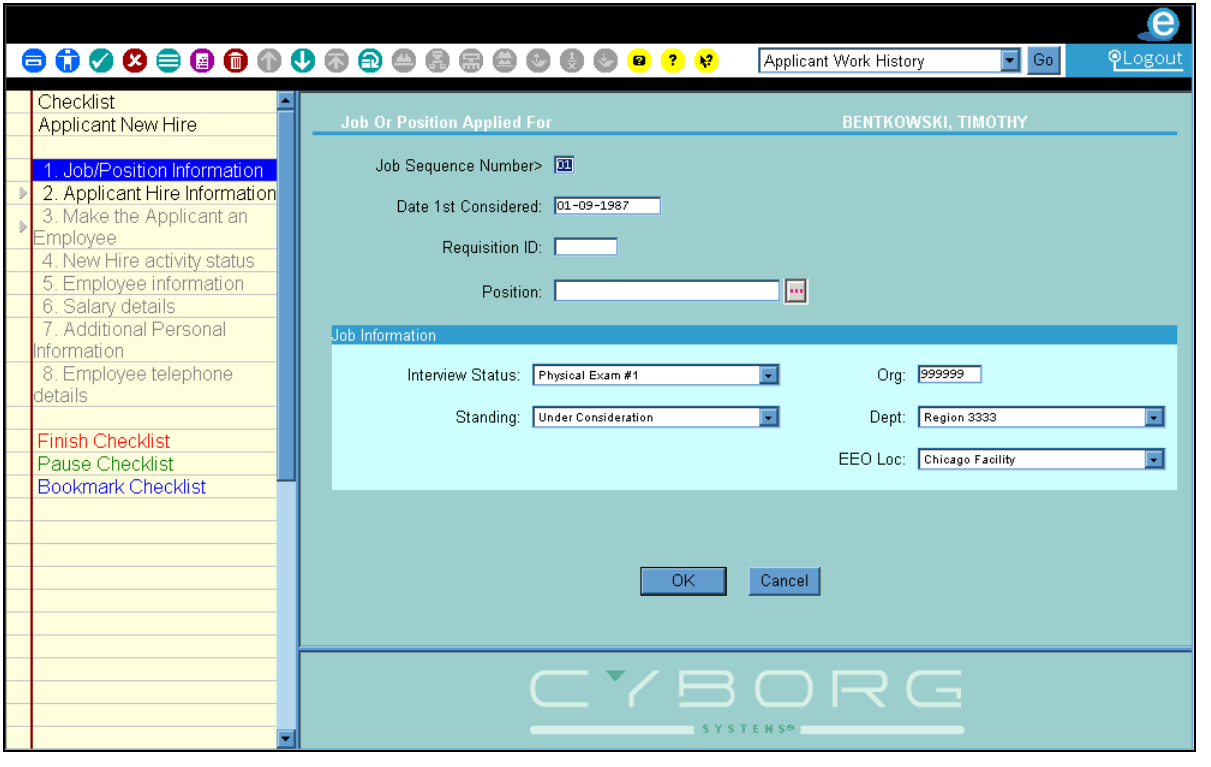
2. Select a paused checklist

Select the paused checklist you want to resume.

For practice, select Applicant New Hire.



If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- Resume a paused checklist ***(on page 61)***

For more information on paused checklists.

Changing to a different employee or organization

The Employee Selection dialog box can be used to select a different employee or organization.

In this example, you are going to select a different Employee Number and Organization.

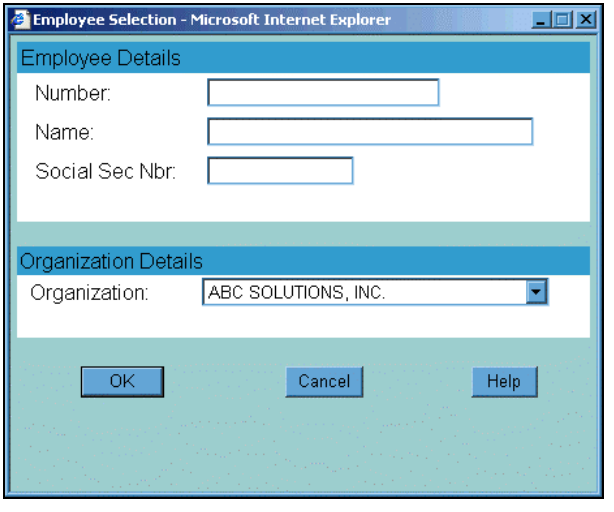
Before you can complete the Guided Practice in this example, you need to have selected a form, an employee, and an organization. Access the Employee Information form (EF-SCR) for Employee Number '1234', in Organization 'Acme Manufacturing'.

1. Access the Employee Selection dialog box

Click the Change Employee button to access the Employee Selection dialog box.

Note: Before you can change to a different employee or organization, you must access a form.

For practice, click the Change Employee button.



2. Enter a Number, Name, or Social Sec Nbr

Enter a number, name, or Social Sec Number of the employee you want to use.

For practice, type Employee Number 'A002'.

3. Select an Organization

Select the Organization that you want to use.

For practice, select 'ABC Solutions, Inc.'.

4. Click OK

When you click OK, the form will display the record for the selected employee.

For practice, click OK.

See also:

- Switching between different employees and organizations ***(on page 64)***

For more information on how you switch between different employees and organizations.

Displaying a list of organizations

To display a list of the organizations that have been established on eCyborg, use the Organization Listing form (COLIST).

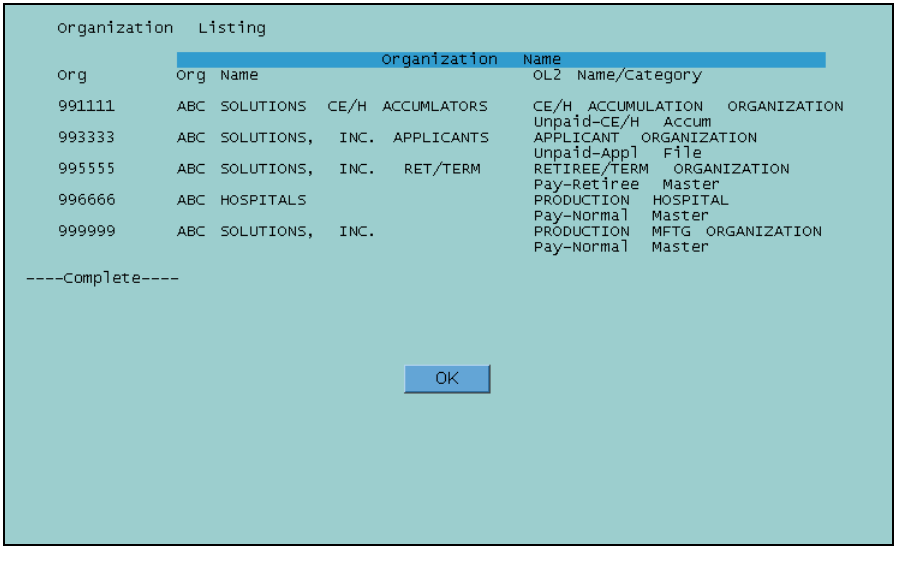
1. Access the Organization Listing form

Access this form by clicking the Enter Command button on the toolbar.

Type COLIST in the Program text box and click OK.

For practice, access the Organization Listing form (COLIST).

If you completed the Guided Practice, the results should look similar to the example that follows:



Note: *The Organization Listing form (COLIST) can have multiple pages. To view the next page of records, click OK.*

The following message will appear when all the records on file have been viewed.

'----Complete----'

Review of Questions Answered

1. How is the Navigator organized?

2. What effect does your user profile have on information you can access?

3. What method is provided to allow for switching between forms?

4. What are checklists?

5. What method is provided to allow the selection of a different employee?

CHAPTER 6

Using the Support Tools

In This Chapter

Introduction

eCyborg support tools provide point-and-click access to a comprehensive set of product information. Whether you are looking for directions for completing a task, an example of a report, or context-sensitive help the information is available to you. This section explains the purpose of the delivered support tools and how to use them.

Tasks

This section explains the following:

- Accessing the Help menu
- Accessing help for all of eCyborg
- Accessing help for a component
- Accessing context-sensitive help for a form
- Accessing context-sensitive help for text and list boxes

Prerequisites

You should be familiar with using web browser software.

Questions answered

The following questions are answered in this section:

1. What types of online help are provided?
2. How do you access help on all of eCyborg?

The Help system

To effectively use the Help system, you should understand how it is organized and what types of help are available. There are several ways in which you can get help online with eCyborg:

- Modular help
- Standard online help
- Step-by-step directions
- Conceptual information
- Quick reference information
- Full text search

Modular help system

The system is delivered with a number of help files, arranged in a logical manner on your web server. Using a modular online help system means that you have two ways of looking at help:

- Help menu—displays help on the entire system, allowing you to search for information even if you are not sure of its location in the system.
- Help on a specific part of the system—allows you to search for and display help relating only to the component of the system in which you are interested.

Both help for all of eCyborg and help for a specific component use standard XHTML pages.

The Help menu

The Help menu provides access to all of the help files provided with eCyborg.

See also:

- Accessing the Help menu ***(on page 108)***

For detailed directions on accessing the Help menu.

- Accessing help on using the eCyborg web client ***(on page 109)***

For detailed directions on using the Help menu.

Standard XHTML help

Extensive online help is provided with eCyborg in the form of XHTML pages, including the following:

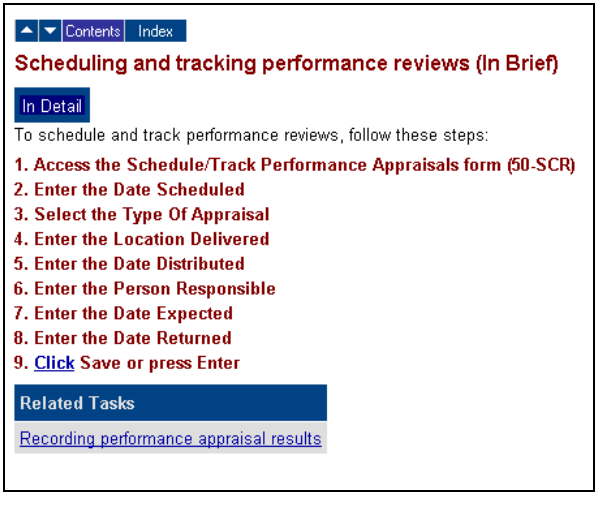
- Step-by-step directions
- Related topic information
- Conceptual information
- Quick reference information

Step-by-step directions

Step-by-step directions are provided for tasks, providing an important source of support while you complete a task.

You can display two levels of information in the detailed directions—in detail and in brief. 'In detail' lists the steps and provides additional rationale and tips. 'In brief' lists only the steps.

The following figure shows the 'In brief' display for the task 'Scheduling and tracking performance reviews':



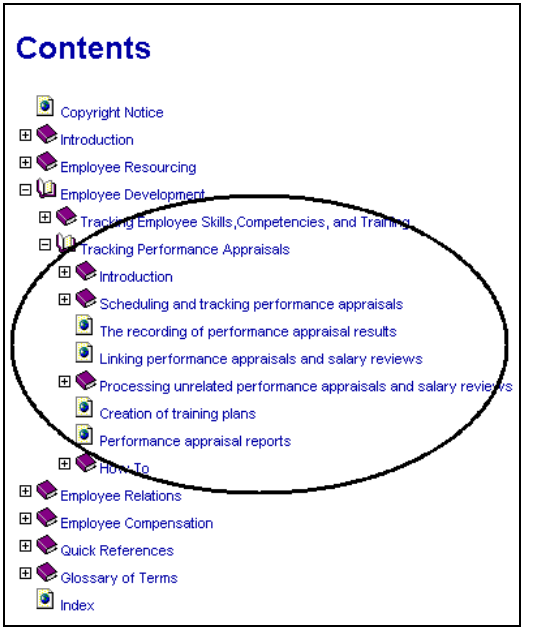
If enabled, the Up and Down arrow buttons will take you to other tasks you might complete in a series. Related tasks are also shown at the bottom of the page.

To access step-by-step directions for a task, you access the help for a form and then select the particular task from the 'See also' list.

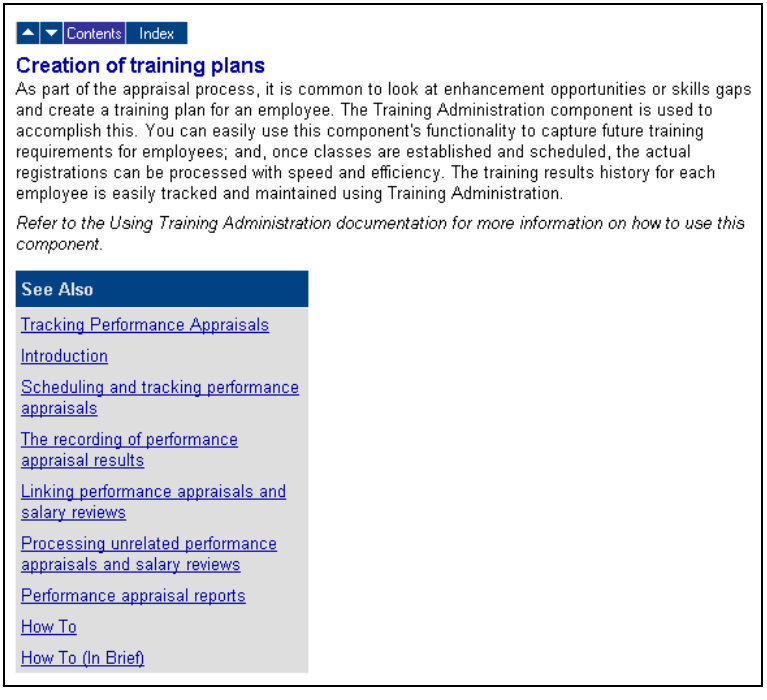
Conceptual information

Supporting conceptual information is provided for all tasks in the help. You can access these by looking in the help for a component.

For example, the Human Resource Management Administration component offers the following conceptual help on tracking a performance appraisal:



If you select the concept 'Creation of training plans', the following information will be displayed:



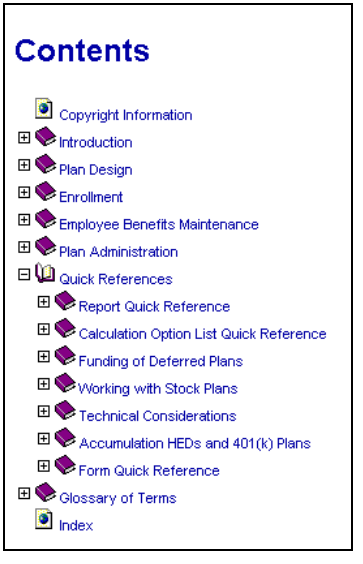
Links to related concepts and tasks are displayed at the bottom of the screen.

Quick reference information

Quick reference information is provided for a variety of information, including the following:

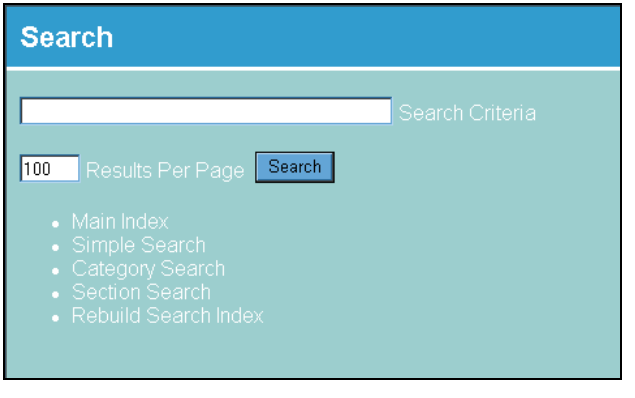
- Reports
- Forms
- Option lists
- Dialog boxes

This information is accessed from the Quick References section of the help.



Full text search

The Help menu includes a full text search, allowing you to search all, or a combination of, the help files. When you click the Search option on the Main Index page of the Help Menu, the main Search page is displayed:



You have five options on this page:

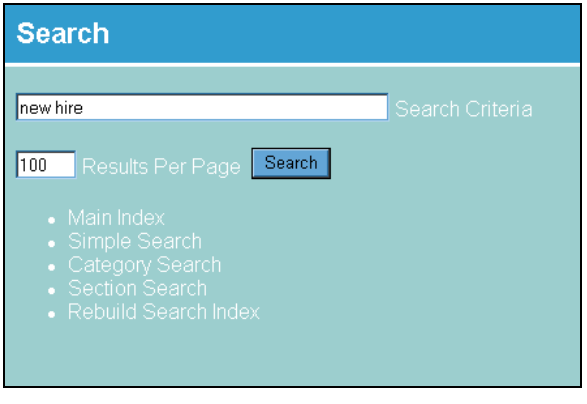
- Main Index
- Simple Search
- Category Search
- Section Search
- Rebuild Search Index

Main Index

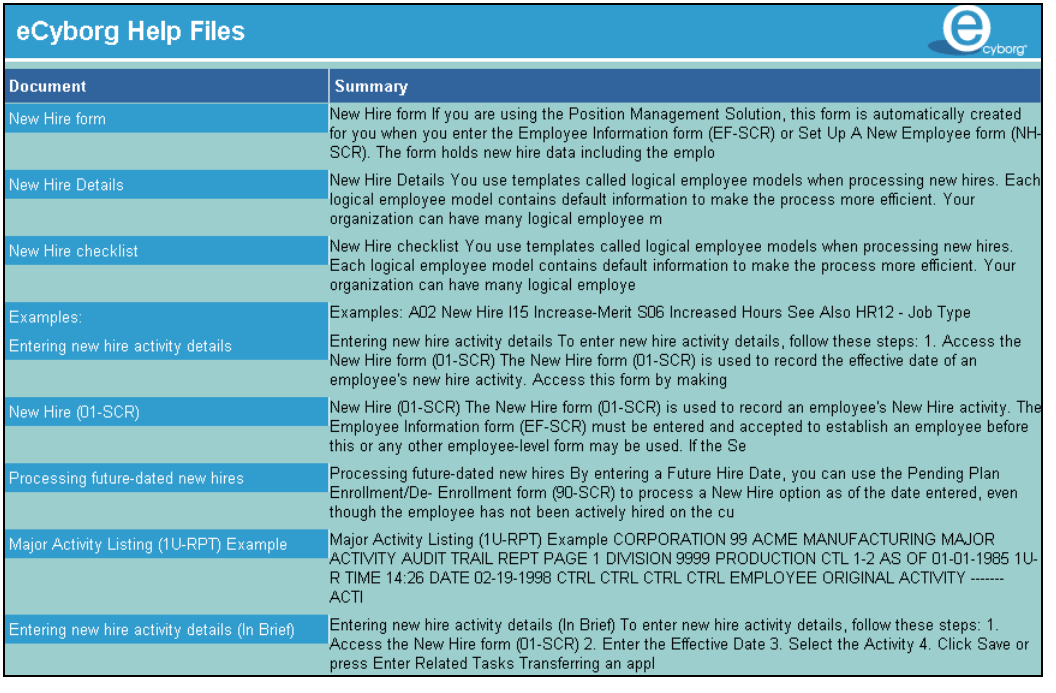
Click this option to display the main Help Menu.

Simple Search

This is the default search, which searches all of the help files for a word or phrase. For example, if you typed the words 'new hire' in the search box, and clicked Search...



...you will get the following results:



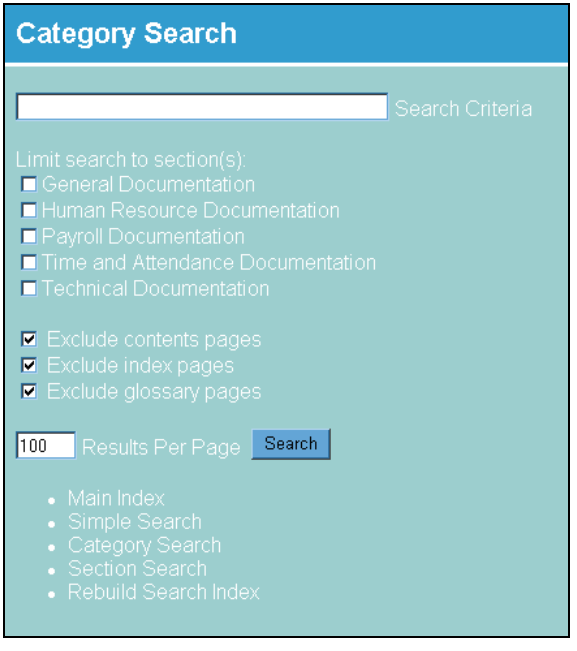
eCyborg Help Files

Document	Summary
New Hire form	New Hire form If you are using the Position Management Solution, this form is automatically created for you when you enter the Employee Information form (EF-SCR) or Set Up A New Employee form (NH-SCR). The form holds new hire data including the emplo
New Hire Details	New Hire Details You use templates called logical employee models when processing new hires. Each logical employee model contains default information to make the process more efficient. Your organization can have many logical employee m
New Hire checklist	New Hire checklist You use templates called logical employee models when processing new hires. Each logical employee model contains default information to make the process more efficient. Your organization can have many logical employe
Examples:	Examples: A02 New Hire I15 Increase-Merit S06 Increased Hours See Also HR12 - Job Type
Entering new hire activity details	Entering new hire activity details To enter new hire activity details, follow these steps: 1. Access the New Hire form (01-SCR) The New Hire form (01-SCR) is used to record the effective date of an employee's new hire activity. Access this form by making
New Hire (01-SCR)	New Hire (01-SCR) The New Hire form (01-SCR) is used to record an employee's New Hire activity. The Employee Information form (EF-SCR) must be entered and accepted to establish an employee before this or any other employee-level form may be used. If the Se
Processing future-dated new hires	Processing future-dated new hires By entering a Future Hire Date, you can use the Pending Plan Enrollment/De- Enrollment form (90-SCR) to process a New Hire option as of the date entered, even though the employee has not been actively hired on the cu
Major Activity Listing (1U-RPT) Example	Major Activity Listing (1U-RPT) Example CORPORATION 99 ACME MANUFACTURING MAJOR ACTIVITY AUDIT TRAIL REPT PAGE 1 DIVISION 9999 PRODUCTION CTL 1-2 AS OF 01-01-1985 1U-R TIME 14:26 DATE 02-19-1998 CTRL CTRL CTRL CTRL EMPLOYEE ORIGINAL ACTIVITY ------- ACTI
Entering new hire activity details (In Brief)	Entering new hire activity details (In Brief) To enter new hire activity details, follow these steps: 1. Access the New Hire form (01-SCR) 2. Enter the Effective Date 3. Select the Activity 4. Click Save or press Enter Related Tasks Transferring an appl

Click on any of the options in the left pane to bring up the relevant help page.

Category Search

You can limit your search to look in one or more categories:



The categories you can select (and therefore include in the search) are:

- General Documentation
  - Using the eCyborg Web Client
  - Optimizing System Features
  - Solution View
  - Field and Verb Descriptions

- Human Resource Documentation
  - Implementing Human Resources Administration
  - Benefits Administration
  - Using Human Resources Administration
  - Position Administration
  - Requisition Administration
  - Salary Administration
  - Training Administration

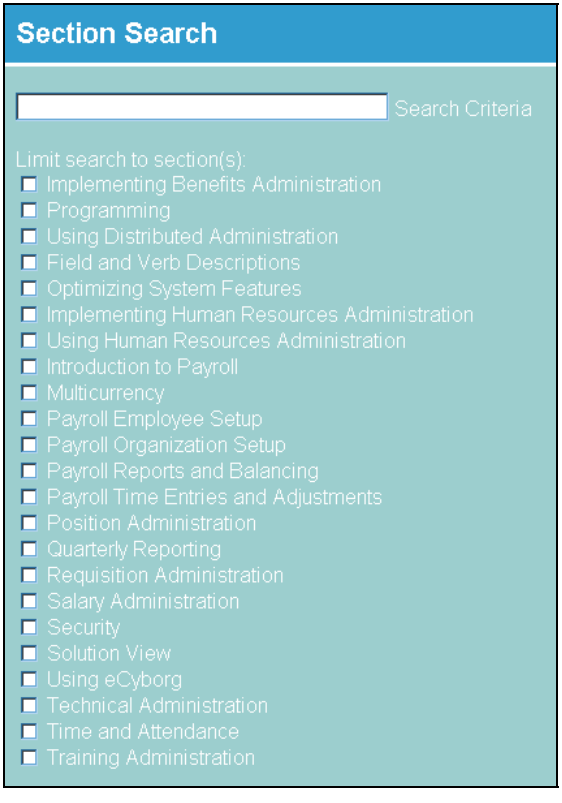
- Payroll Documentation
  - Introduction to Payroll
  - Payroll Organization Setup
  - Payroll Employee Setup
  - Payroll Reports and Balancing
  - Payroll Time Entries and Adjustments
  - Multicurrency
  - Quarterly Reporting

- Time and Attendance Documentation
  - Time and Attendance Administration

- Technical Documentation
  - Programming
  - Security
  - Distributed Administration
  - Technical Administration

Section Search

You can limit your search to particular help files:



Select those sections you wish to include in your search.

Rebuild Search Index

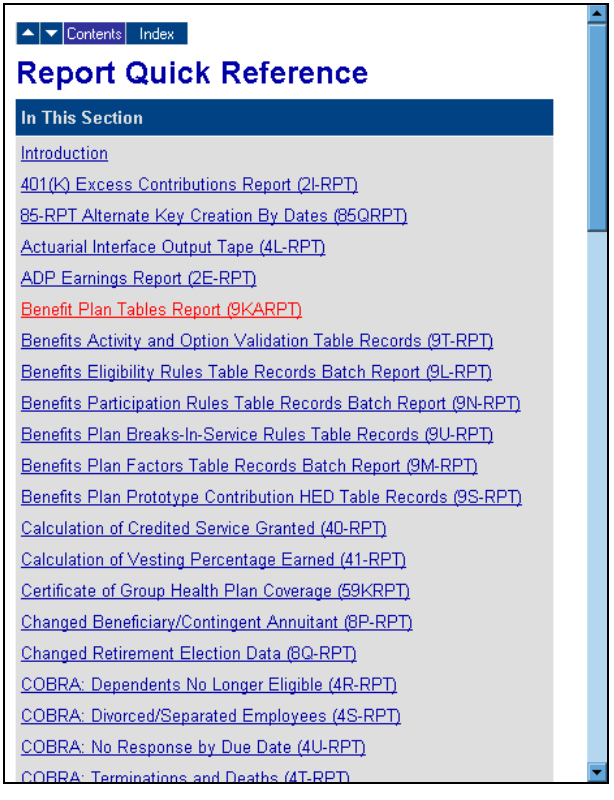
The Rebuild Search Index option is used when the main index needs to be recreated. This is an administrative task, and will be carried out by your System Administrator if there are any changes or additions to the help files.

Report information

You can access report information directly from the Navigator. Each process contains a Report Information item; this item is always the bottom item in the list.

The following figure shows the tasks and Report Information item for the process Track Performance Appraisals. To view report information, click the Report Information option.

Clicking on the Report Information option will bring up a list of all of the reports associated with a component. The following example shows the Reports available for the Benefits Administration component:



You can then choose a specific report for more detailed information. For example, if you selected quick reference help on the 'Benefit Plan Tables Report (9KARPT)' report, the following information would be displayed. Click the small picture of the camera to see an example of the report.

Benefit Plan Tables Report (9KARPT)

Example

The Benefit Plan Tables Report (9KARPT) displays all of Benefits Administration table records associated with a plan or a range of plans specified on the parameter form.

Business Tasks

This report is used to complete the following business tasks:

- Review benefits plan rules and options
- Analyze plan coverage and cost
- Analyze plan eligibility rules
- Analyze vesting and participation rules
- Analyze HED prototype

Report field details

The fields on this report are listed in the documentation for each of Benefit Administration table record reports.

Parameter options and setup

- **Control Number**—Enter the Control Number of the table set you want to print. Specify this parameter and leave the As Of Date field blank to include all table records in the table set, regardless of date.
- **As Of Date**—Enter in CCYYMMDD or MM-DD-CCYY (US and Canada) or CCYYDDMM or DD-MM-CCYY (elsewhere) format to select the table records in effect as of this date. Specify this parameter and leave the Control Number field blank to include all table records.
- **Beginning Range Plan ID**—Enter the first benefit plan in the range to be printed. If you want to print only one plan, specify it here.
- **Ending Range Plan ID**—Enter the last benefit plan in the range to be printed.

See also:

- ***Plan documentation for welfare plans***

For information on how to use this report.

Context-sensitive help

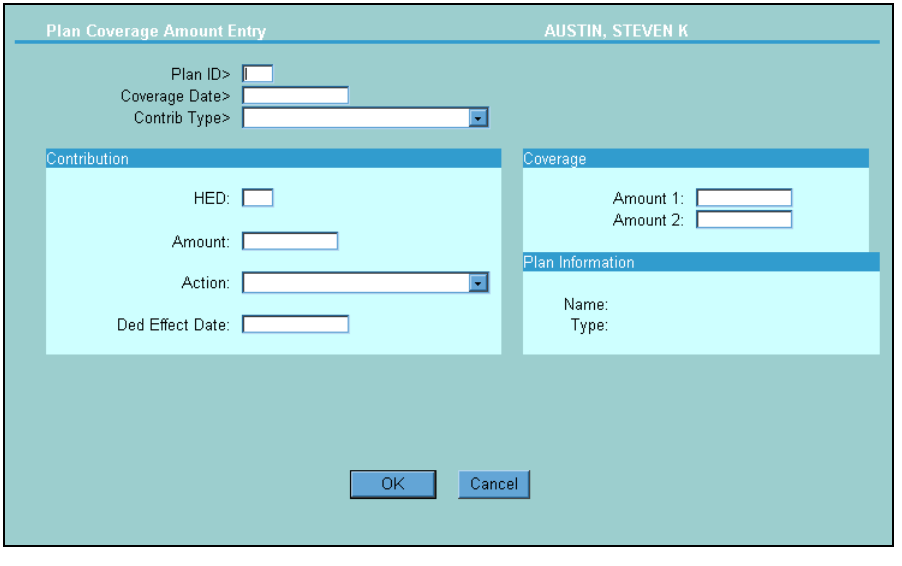
The levels of context-sensitive help that are available to you are:

- Form
- Text or list box
- Dialog

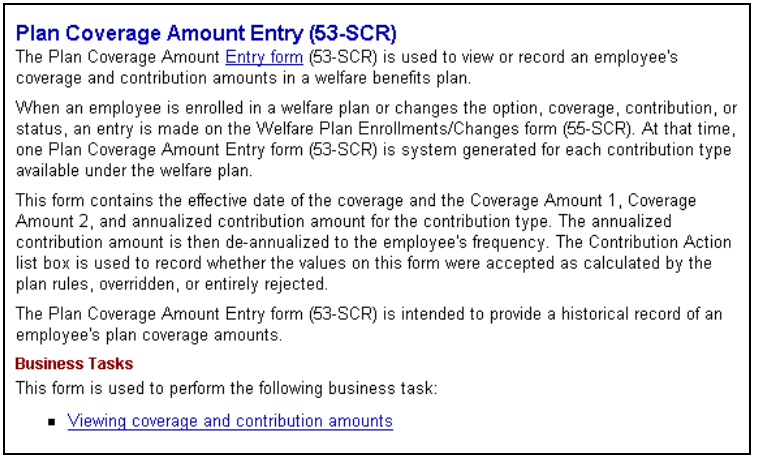
Help on forms

To learn the purpose of a form, use the form-level help. To display form-level help, access a form and click the Help on This Form button on the toolbar.

For example, if you click the form-level help button on the Plan Coverage Amount Entry form (53-SCR):



…you will see this:



Plan Coverage Amount Entry (53-SCR)

The Plan Coverage Amount Entry form (53-SCR) is used to view or record an employee's coverage and contribution amounts in a welfare benefits plan.

When an employee is enrolled in a welfare plan or changes the option, coverage, contribution, or status, an entry is made on the Welfare Plan Enrollments/Changes form (55-SCR). At that time, one Plan Coverage Amount Entry form (53-SCR) is system generated for each contribution type available under the welfare plan.

This form contains the effective date of the coverage and the Coverage Amount 1, Coverage Amount 2, and annualized contribution amount for the contribution type. The annualized contribution amount is then de-annualized to the employee's frequency. The Contribution Action list box is used to record whether the values on this form were accepted as calculated by the plan rules, overridden, or entirely rejected.

The Plan Coverage Amount Entry form (53-SCR) is intended to provide a historical record of an employee's plan coverage amounts.

Business Tasks

This form is used to perform the following business task:

- Viewing coverage and contribution amounts

The Business Tasks section provides links to detailed directions for completing business tasks associated with this form.

See also:

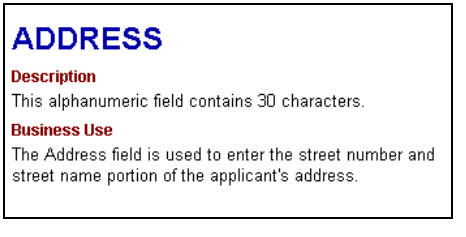
■ Accessing context-sensitive help for a form ***(on page 111)***

For detailed directions on accessing context-sensitive help for a form.

Help on text and list boxes

To access help on text and list boxes on a form, use the 'What's This?' help button on the toolbar, and then click in the box you want to know about.

For example, if you wanted to know about the Address text box on the Employee Information form (EF-SCR), you would drag the help icon to 'Address' and click. In this instance, the following help will display:



ADDRESS

Description

This alphanumeric field contains 30 characters.

Business Use

The Address field is used to enter the street number and street name portion of the applicant's address.

See also:

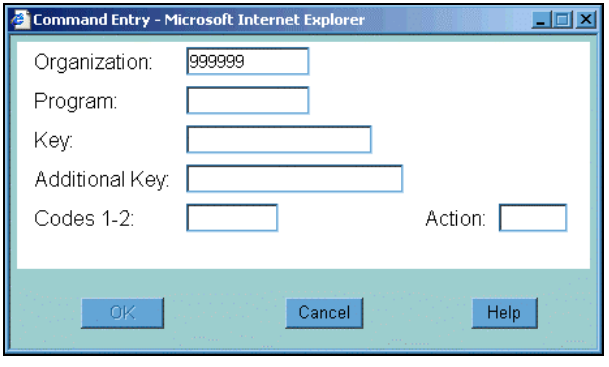
■ Accessing context-sensitive help for text and list boxes ***(on page 112)***

For detailed directions on accessing context-sensitive help for a box or list.

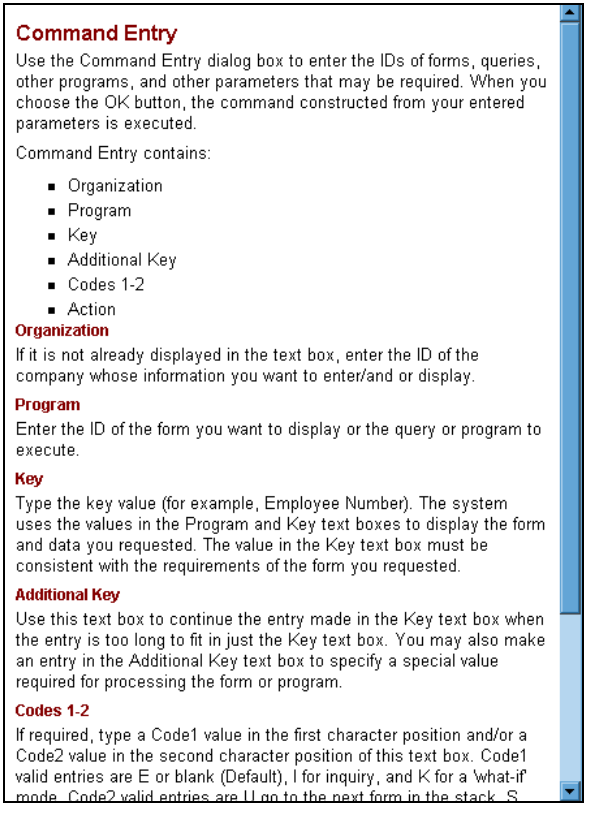
Help on dialog boxes

Clicking on the Help button on a dialog box will bring up the help associated with that dialog.

For example, if you click the Help button on the Command Entry dialog box:



...you will see this help page displayed:



Command Entry

Use the Command Entry dialog box to enter the IDs of forms, queries, other programs, and other parameters that may be required. When you choose the OK button, the command constructed from your entered parameters is executed.

Command Entry contains:

- Organization
- Program
- Key
- Additional Key
- Codes 1-2
- Action

Organization

If it is not already displayed in the text box, enter the ID of the company whose information you want to enter/and or display.

Program

Enter the ID of the form you want to display or the query or program to execute.

Key

Type the key value (for example, Employee Number). The system uses the values in the Program and Key text boxes to display the form and data you requested. The value in the Key text box must be consistent with the requirements of the form you requested.

Additional Key

Use this text box to continue the entry made in the Key text box when the entry is too long to fit in just the Key text box. You may also make an entry in the Additional Key text box to specify a special value required for processing the form or program.

Codes 1-2

If required, type a Code1 value in the first character position and/or a Code2 value in the second character position of this text box. Code1 valid entries are E or blank (Default), I for inquiry, and K for a 'what-if' mode. Code2 valid entries are U go to the next form in the stack, S

Electronic documentation

Cyborg Systems, Inc. hosts a full set of One-Stop Documentation on the Cyborg Users Bulletin Board Service (CUBBS).

Each of these electronic manuals is a complete One-Stop Document; it includes all of the appendices, glossary, index, and the training exercises you would find in a printed manual from Cyborg Systems. You can access and view this set of One-Stop Documentation user manuals from CUBBS, allowing you to print an entire manual or sections of a manual.

Note: *You may not have access to CUBBS, in which case you would need to speak to your Administrator who should be able to access the documentation for you.*

Note: *These manuals may be stored locally on a network server. Consult your System Administrator for specific instructions on how to access the electronic documentation at your site.*

The electronic documents are saved in the Portable Document Format (PDF) from Adobe Systems, Inc. You cannot view these documents in your word processor, rather you would use the Adobe Acrobat Reader (available as a free download from Adobe Systems, Inc.—www.adobe.com).

Adobe Acrobat Reader

The Adobe Acrobat Reader is a tool produced by Adobe Systems, Inc. The Acrobat Reader allows you to access Acrobat documents produced by Cyborg Systems. These documents

can be used online, or printed out for an exact replica of the Cyborg documentation. The Adobe Acrobat Reader will help you to:

- Access and read all electronic documentation
- Search for any word or phrase within a document
- Search for any word or phrase across all electronic documents
- Print out a hard copy of any document precisely as it would have been produced by Cyborg Systems, Inc.

☞ *Refer to the Adobe Acrobat Online Guide for further information on how to use the Adobe Acrobat Reader. You can access the Adobe Acrobat Online Guide by starting the Acrobat Reader and selecting the Help menu and then the Reader Online Guide option.*

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Completing the Guided Practice

In the following task(s) you will display employee data for employee Steve Austin, whose Employee Number is 1234.

In order to complete the Guided Practice in the task(s), you first need to access the Employee Information form (EF-SCR) for Employee Number 1002 in organization 999999, ACME Manufacturing.

Access this form by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Employee Details
Task: Basic Employee Information

Accessing the Help menu

To access the Help menu from the toolbar, click the Help Menu button:

The help files are grouped in components.

For practice, access the Help menu from the toolbar.

See also

- The Help system *(on page 89)*

For more information about help on eCyborg.

Accessing help on using the eCyborg web client

To access help on using the eCyborg web client, follow these steps:

1. Access the Help menu

Access the Help menu by clicking the Help Menu button.

For practice, access the Help menu..

2. Click General

Click the General option.

For practice, click the General option.

3. Click Help on using eCyborg

Click the 'Help on using eCyborg' item. The help file for using eCyborg will display in your browser window.

For practice, click 'Help on using eCyborg'.

See also:

- The Help system ***(on page 89)***

For more information about help on eCyborg.

Accessing help for a component from the Help menu

To access help for a particular component of the system using the support interface, follow these steps:

1. Access the Help menu

Access the Help menu by clicking the Help Menu button on the toolbar .

For practice, access the Help menu.

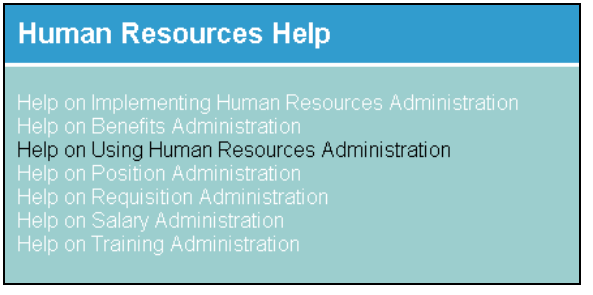
2. Click an item containing a component

Click the item in which you are interested.

For practice, click 'Human Resources'.

3. Click the item in which you are interested

Click an item and the help file will be opened.



For practice, click 'Help on Using Human Resources Administration'.

See also:

- The Help system ***(on page 89)***

For more information about help on eCyborg.

Accessing context-sensitive help for a form

To access context-sensitive help for a form, access a form and follow these steps:

1. Access a form

Access the form for which you want to see help.

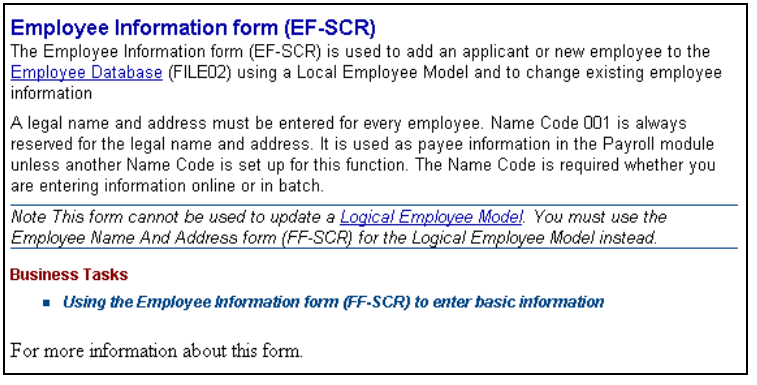
For practice, access the Employee Information form (EF-SCR) for employee number 1234.

2. Click the Help on this Form button

Click the Help on this Form button on the toolbar. The help for that form will be displayed in a browser window.

For practice, click the Help on this Form button.

If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- Help on forms ***(on page 102)***

For more information about help on forms.

Accessing context-sensitive help for text and list boxes

To access context-sensitive help for a box or list, access a form and follow these steps:

1. Access a form and position the pointer

Access the desired form and then position the pointer in the text or list box for which you want to see help.

For practice, access the Employee Information form(EF-SCR) for employee number 1234.

2. Click the 'What's This?' button

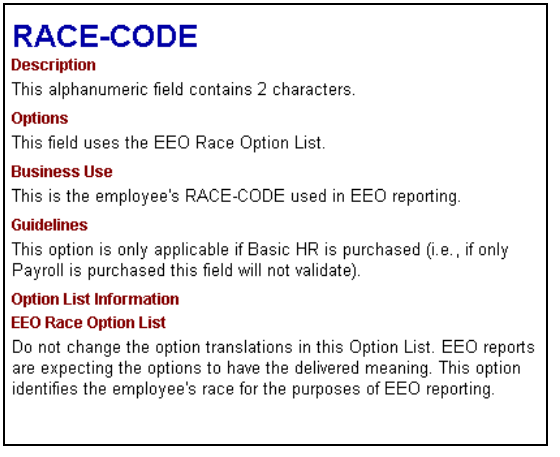
Click the 'What's This?' button on the toolbar. The pointer will now have a question mark associated with it.

For practice, click the 'What's This?' button.

3. Click the box or list

Click the box or list about which you want help to display the context-sensitive help.

For practice,click the Race option list (HR22) to display the context-sensitive help.



RACE-CODE

Description

This alphanumeric field contains 2 characters.

Options

This field uses the EEO Race Option List.

Business Use

This is the employee's RACE-CODE used in EEO reporting.

Guidelines

This option is only applicable if Basic HR is purchased (i.e., if only Payroll is purchased this field will not validate).

Option List Information

EEO Race Option List

Do not change the option translations in this Option List. EEO reports are expecting the options to have the delivered meaning. This option identifies the employee's race for the purposes of EEO reporting.

See also:

- Help on text and list boxes ***(on page 103)***

For more information about field-level help.

Review of Questions Answered

1. What types of online help are provided?

2. What is the Help menu?

CHAPTER 7

Working with Data

In This Chapter

Introduction

When you begin to enter data into eCyborg, you need to know how to select different employees, as well as the different formats that the system will accept when you enter different types of data. This section tells you how to access a different employee and explains the different data formats.

Tasks

This section explains the following:

- Displaying employee data using Employee Number, name, or Social Security Number
- Displaying employee data using phonetic search
- Displaying a selection list in the message area
- Choosing a record from a selection list
- Displaying an employee profile
- Clearing all boxes on a form
- Entering dates
- Entering numeric data
- Using option lists
- Saving changes to a form
- Canceling changes to a form
- Adding a record
- Modifying a record
- Deleting a record
- Responding to reject messages
- Responding to warning messages

Prerequisites

Before you can complete the tasks in this section you need to have completed the following:

- Logged on to eCyborg.
- Read ***Exploring the Work Area*** (on page 37) that introduces you to eCyborg interface.
- Read ***Navigating the System*** (on page 49) that explains how you navigate eCyborg.

Questions answered

The following questions are answered in this section:

1. What methods are available for viewing employee and organizational data?
2. What types of numeric data are used?
3. What are option lists and how are they used?
4. What actions can be performed when working with forms?
5. How are employee and organizational data deleted?
6. What types of system messages are provided?

Viewing data

When using eCyborg, you work with both employee and organizational data. This section explains how to access employee data.

Employee data

Employee data is stored in records that contain information that is specific to an employee.

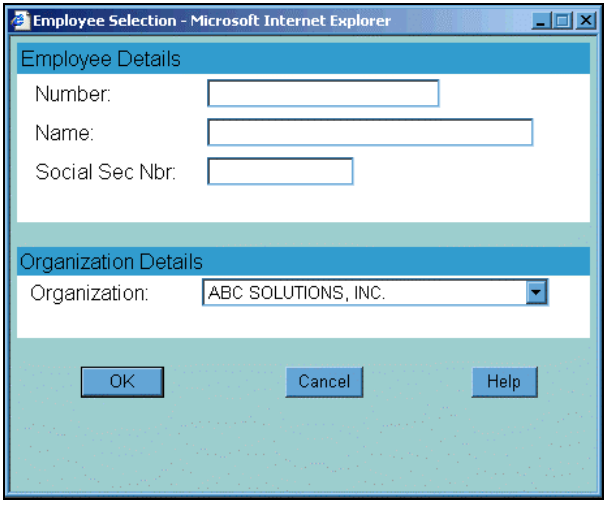
Accessing employee data

Employee data is stored in records that contain information that is specific to an employee.

In order to view a record for an employee, you need to identify to the system which employee's record you want to access.

You can access an employee's record by entering the relevant information in one of three text boxes in the Employee Selection dialog box.

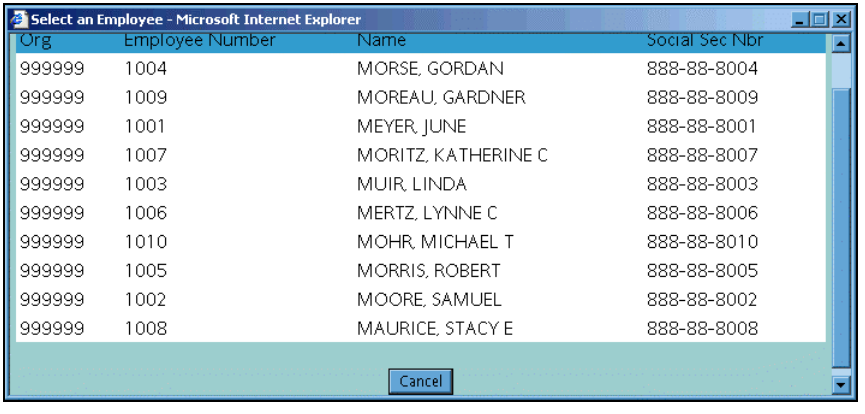
- Number—Employee Number
- Name—Employee Name
- Social Sec Nbr—Employee Social Security Number



You must then select the organization to which the employee belongs.

When you have entered the relevant information, click OK to access the employee's record.

When you enter an employee's name, you can enter either the complete name using the correct mix of upper and lower case, or just the last name. If you enter the last name, the Select an Employee dialog box will be shown, from which you can select the exact employee and access his or her record.



See also:

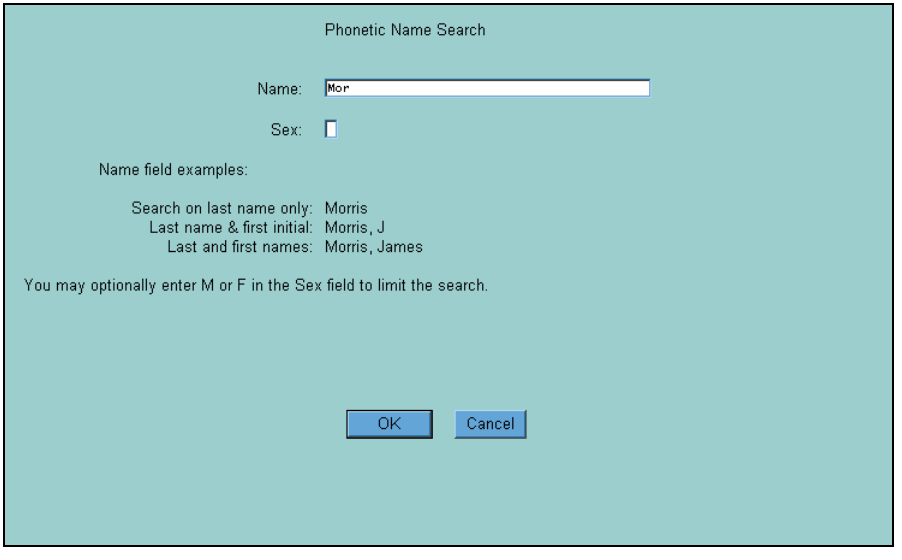
- Displaying employee data using Employee Number, name or Social Security Number ***(on page 139)***

For detailed directions on viewing employee data.

Accessing an employee using phonetics

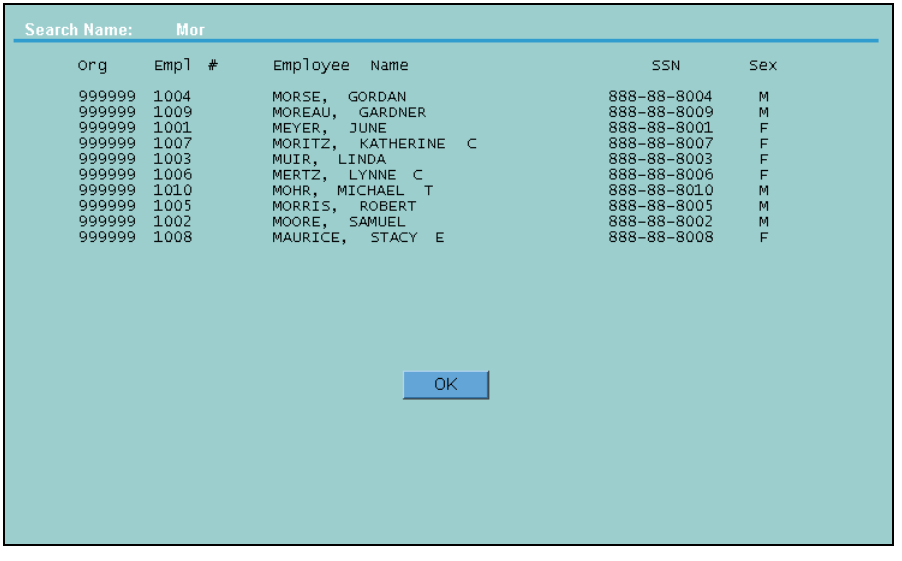
There may be occasions when you are provided with an employee's name, and you need to check the system to ensure that you have the correct spelling and that there are not several employees with a similar name.

When you enter a name on the Employee Phonetic Name Lookup form (PHONET), any name that sounds close to your guessed spelling is displayed, so that you can find the correct spelling.



When the results of the search are displayed, you can find out:

- Which organization he or she is in
- The Employee Number
- The correct spelling of the employee's name
- The Social Security Number
- The Sex of the employee



When you have this information, you can use the Employee Selection dialog box to access the employee's record.

Click OK to return to the Employee Phonetic Name Lookup form (PHONET).

See also:

- Displaying employee data using phonetic search ***(on page 141)***

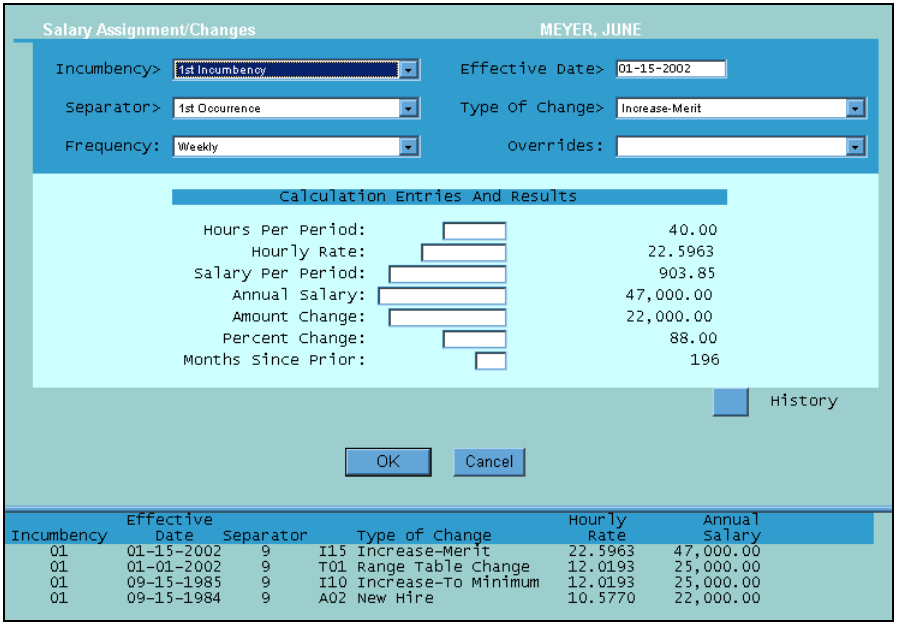
For detailed directions on using the Employee Phonetic Lookup form.

Viewing multiple occurrences of data on a form

When you access a form that contains historical or multiple occurrences of data, the most current data will be displayed. If a form has multiple or historical records, you can access these records through the Selection list. For example, from the Salary Assignment/Changes form (40-SCR) you can access the history of an employee's salary and assignment changes. The Selection list is displayed in the Message area.

You can display the Selection list using the Selections button on the Standard toolbar. The Selections button is only enabled when there are multiple or historical records.

The following example shows the history of June Meyer's salary and assignment changes:



You can select a record from this list and display it in the Form area by doing one of the following:

- Clicking anywhere on an item in the list
- Using the up and down arrows on the toolbar to display in the Form area the different records listed on the Selection list

See also:

- Displaying a selection list in the Message area ***(on page 144)***

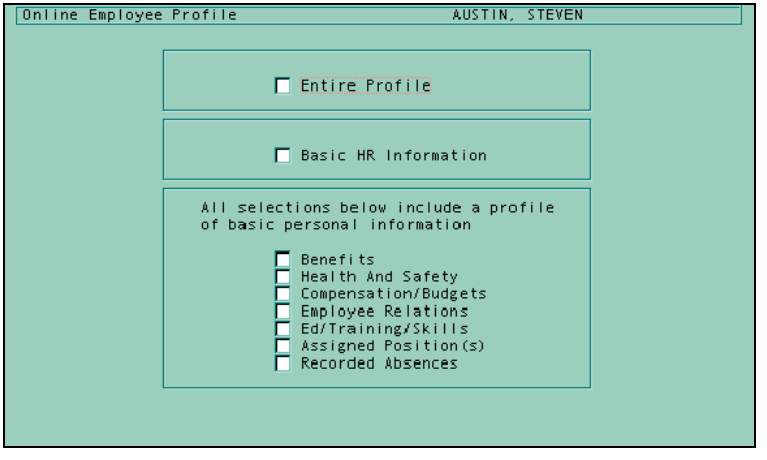
For detailed directions on accessing multiple occurrences of a form.

- Choosing a record from a selection list ***(on page 145)***

For detailed directions on selecting a record from the selection list.

Employee Profiles

You can use an employee profile to view a summary listing of all or part of an employee's data. The Online Employee Profile form (PROFIL) displays data from different parts of an employee's master record. An employee profile can be used to view data on an employee's benefits, training, or absences.



Note: This feature is typically used by experienced users who are very familiar with employee data.

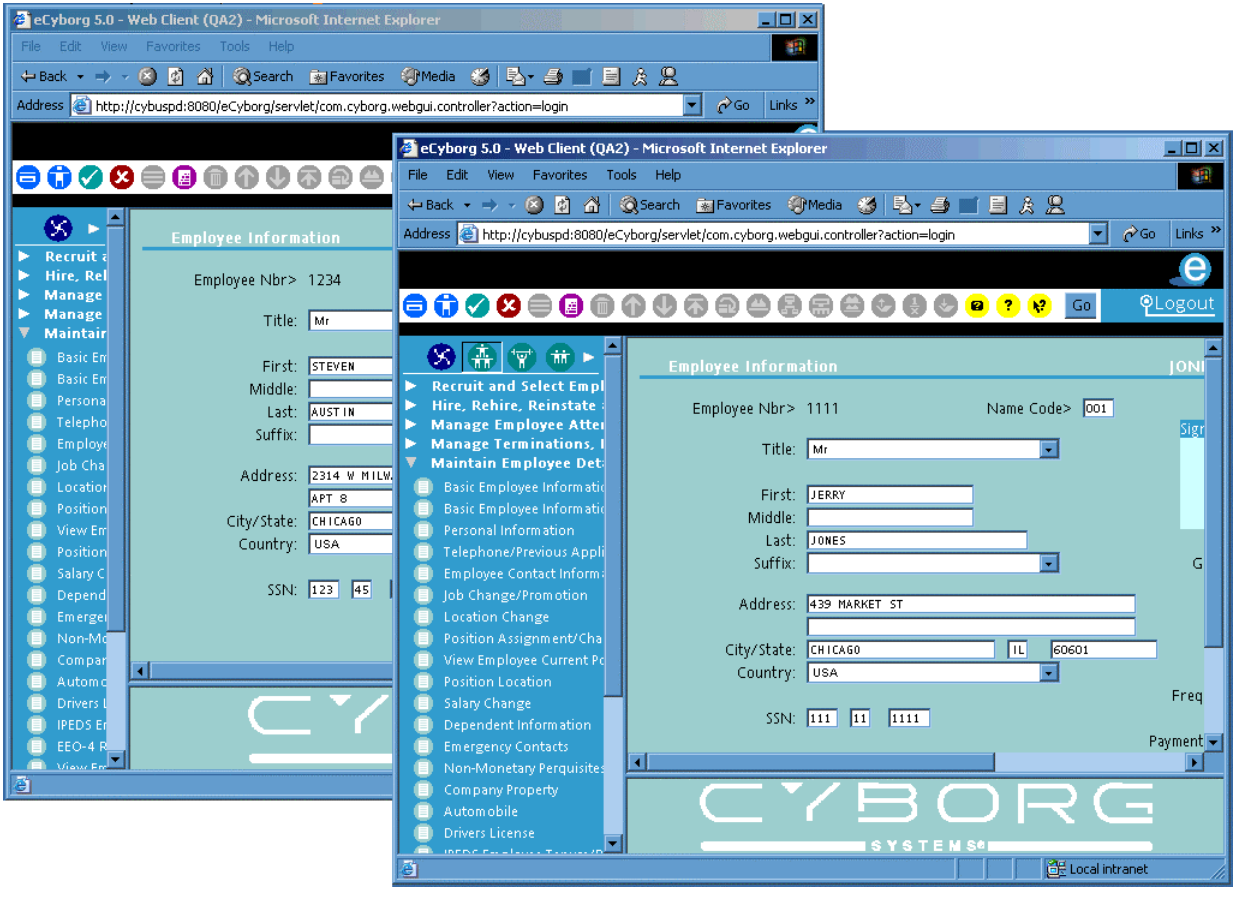
See also:

- Displaying an employee profile ***(on page 145)***

For detailed directions on displaying an employee profile.

Using multiple sessions to view additional data

If you need to view two forms at once, you can run multiple sessions of eCyborg and either toggle between the two sessions, or adjust the size of your browser's window so that you can see two forms simultaneously.


eCyborg 5.0 - Web Client (QA2) - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://cybuspd:8080/eCyborg/servlet/com.cyborg.webgui.controller?action=login
Go Links
Employee Information
Employee Nbr> 1234
Title: Mr
First: STEVEN
Middle:
Last: AUSTIN
Suffix:
Address: 2314 W MILW.
APT 8
City/State: CHICAGO
Country: USA
SSN: 123 45
eCyborg 5.0 - Web Client (QA2) - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://cybuspd:8080/eCyborg/servlet/com.cyborg.webgui.controller?action=login
Go Logout
Recruit and Select Empl
Hire, Rehire, Reinstate
Manage Employee Atte
Manage Terminations,
Maintain Employee Det
Basic Employee Informati
Basic Employee Informati
Personal Information
Telephone/Previous Appli
Employee Contact Inform
Job Change/Promotion
Location Change
Position Assignment/Cha
View Employee Current Pc
Position Location
Salary Change
Dependent Information
Emergency Contacts
Non-Monetary Perquisites
Company Property
Automobile
Drivers License
Employee Information
Employee Nbr> 1111
Name Code> 001
Title: Mr
First: JERRY
Middle:
Last: JONES
Suffix:
Address: 439 MARKET ST
City/State: CHICAGO IL 60601
Country: USA
SSN: 111 11 1111
Payment
CYBORG
SYSTEMS
Local intranet

Adding and modifying data

There are different types of text box in eCyborg:

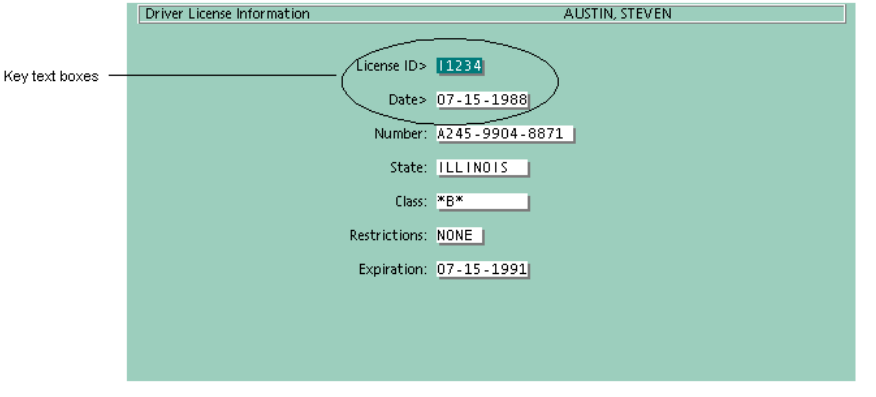
- Key
- Character
- Date
- Numeric

In order to enter data correctly, you need to know what types of data can be entered into the different types of text boxes.

Key text boxes

Every form will have at least one key item (text box, option list, and so forth). eCyborg uses key items as the means of making each record unique. A key item is identified by a > (greater than) symbol next to the text box or display on a form.

For example, there are two unique items on the Driver License Information form (25-SCR), License ID and Date. These items are needed in order to make the record unique:



Character text boxes

Character text boxes are alphanumeric text boxes. They can contain text or numeric characters. Two types of character text boxes are used in eCyborg:

- Unformatted character text boxes—contain 1 to 60 characters that can be entered in any order or format.
- Formatted character text boxes—contain 1 to 30 characters that must be entered in a specific format.

Date text boxes

Date information is presented in the following formats:

- MM-DD-CCYY (US and Canada, excluding Quebec)
- DD-MM-CCYY (elsewhere)
  - MM—Month (01 for January, 12 for December)
  - DD—Day (01 for the first of the month, 10 for the tenth of the month)
  - CC—Century (19 for the twentieth century, 20 for the twenty-first century)
  - YY—Year (02 for the second year of the century)

For example 12-31-2002 represents December 31, 2002 in the MM-DD-CCYY format. 31-12-2002 represents December 31, 2002 in the DD-MM-CCYY format.

Numeric text boxes

eCyborg is delivered with several types of numeric text boxes. When you enter numerical data that contains decimals into these text boxes, you must follow certain formats. The numeric text boxes include the following:

- Rates
- Hours
- Percentages
- Amount/Salary

See also:

- Entering numeric data ***(on page 149)***

For detailed directions on entering numeric data.

Numeric text boxes and decimals

Most of the numeric text boxes use decimal places.

When you enter numeric data that contains decimal places, you can either enter the decimal place manually, or let the system enter the decimal for you.

The following formats must be used when entering numeric data that contains decimals.

Rate text boxes

A rate text box uses four decimal places. For example, 12.40 can be entered as:

- 12.40
- 12.4000
- 124000

Hour text boxes

An hour text box uses two decimal places. For example, 40 hours can be entered as:

- 40.
- 4000

Percentage text boxes

A percentage text box uses two decimal places. For example, 33.3% can be entered as:

- 33.3
- 3330

Amount and Salary text boxes

An amount or salary text box uses two decimal places. For example, 1,000.00 can be entered as:

- 1000.
- 100000

See also:

- Entering numeric data ***(on page 149)***

For detailed directions on entering numeric data

Option lists

An option list contains a list of predefined options from which you may choose. You must choose one of the predefined options as your selection. In contrast to a character text box, you can not key your own data into an option list.

For example, the Frequency option list (PP29) on the Employee Information form (EF-SCR) has the following options:

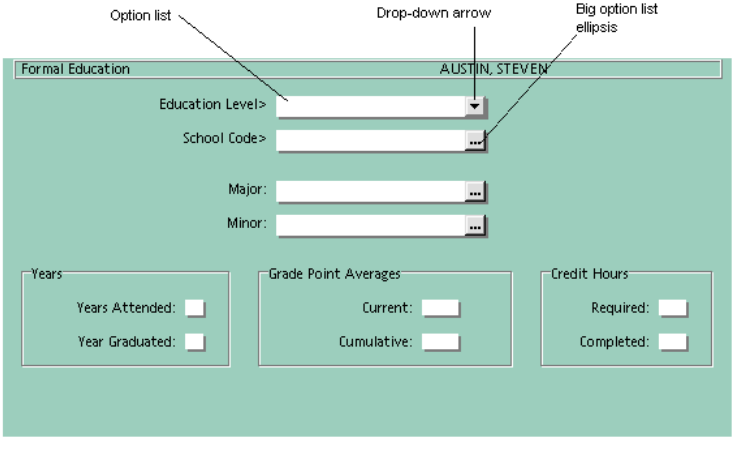
- None
- Bi Weekly
- Monthly
- Semi Monthly
- Weekly

Types of option lists

There are two types of option lists:

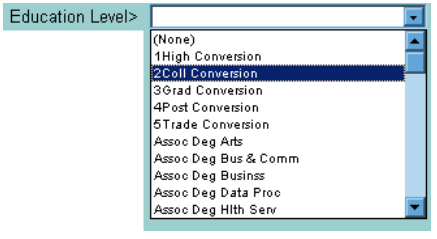
- Standard option lists—identified by a drop-down arrow

- Big option lists—identified by an ellipsis



Standard option list

Click the drop-down arrow to display the option list. Select an option by clicking it. When you select an option, the list collapses and your selection is displayed.



See also:

- Selecting an option from an option list ***(on page 150)***

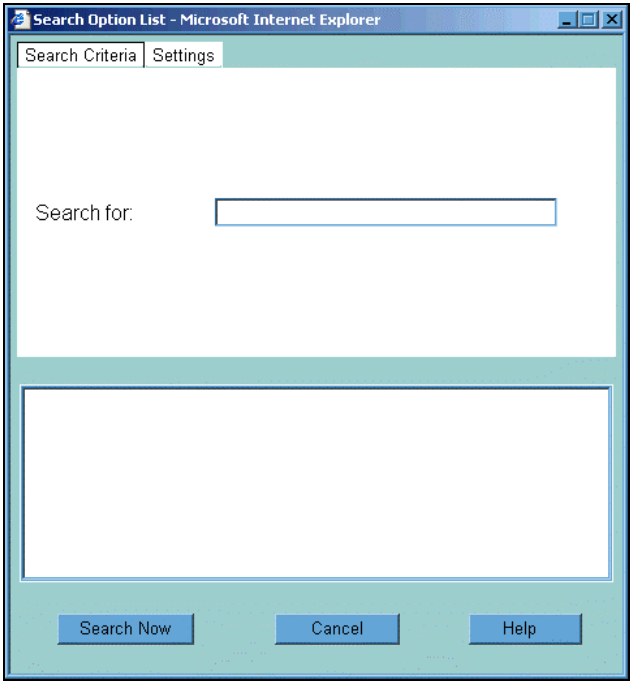
For detailed directions on using an option list.

Big option list

A big option list is indicated by an ellipsis (three dots where the drop-down arrow would normally be displayed):

A big option list is used to help you narrow the selections from a large list. For example, on the Formal Education form (30-SCR) the School Code option list (HR32) contains too many education establishments to be displayed in a standard drop-down list box.

When you access a big option list, the Search Option List dialog box is shown:



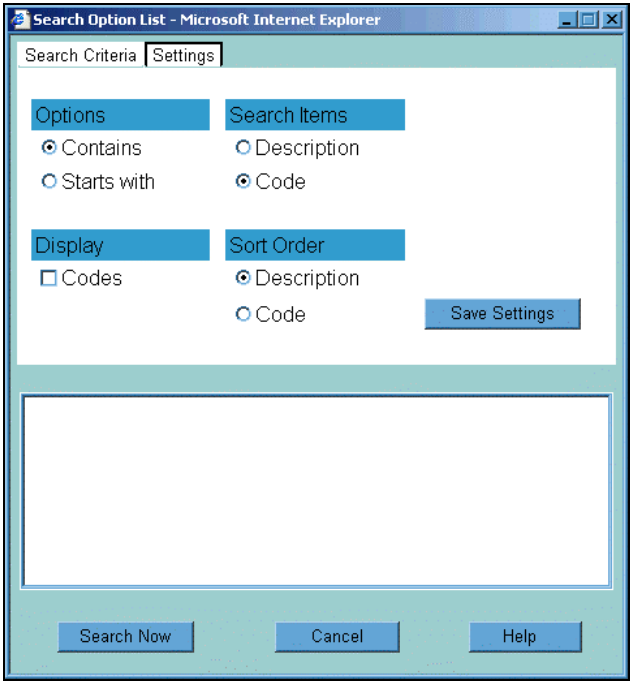
The Search Option List dialog box contains two tabs—Search Criteria and Settings.

Search Criteria tab

The Search Criteria tab contains the Search for text box. To search for an option, enter either its complete name or part of its name. For example, you could enter all or part of the name of the educational establishment you want to select.

Settings tab

When you have entered an option, you can click the Search Now button, or you can refine your search using the options on the Settings tab:



- Options group box
  Choose to search for an option that either Starts with or Contains your choice.

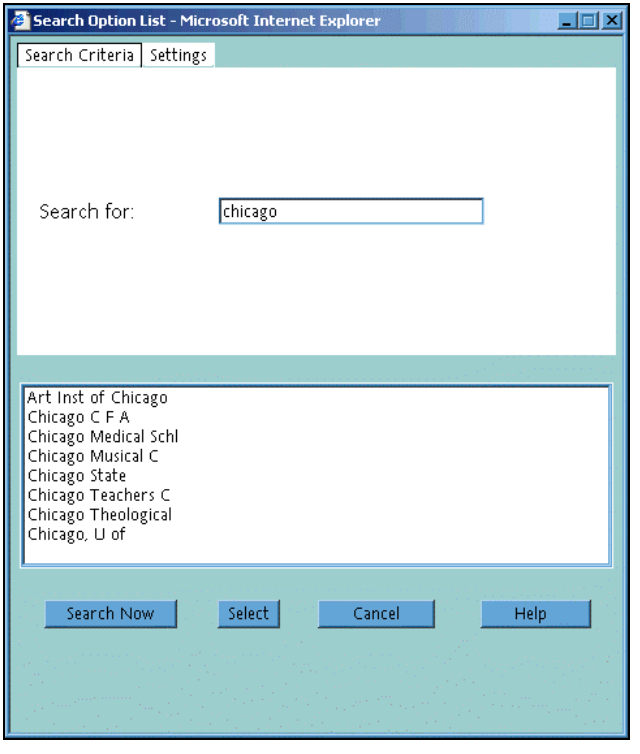
- Search Items group box
  Choose to search for a Description of the educational establishment or its Code.

- Display group box
  Choose the Codes check box to display the code for each educational establishment.

- Sort Order group box
  Choose to sort the educational establishments alphabetically by Description or Code.

If you have used the Settings tab to refine your search, click the Search Now button to begin the search.

If the system finds an option(s) that matches your selection, the Search Option List dialog box reveals the results. The following example shows the results for a search for anything containing 'chicago' in the School Code option list on the Formal Education form (30-SCR):



If your option is displayed, you can select it and click the Select button.

If your selection is not displayed, you can try again by entering a new option in the Search for text box.

See also:

■ Selecting an option from a big option list ***(on page 151)***
For detailed directions on using a big option list.

Form actions

When you access a form, you have a range of options for actions.

Note: *You cannot close a form on the Form area. In order to protect confidential information from being observed on your screen, you should either log out of eCyborg or minimize it when you are not using it.*

The following table contains the options that are available:

Button	Name	Description
	Save	Saves the current data. This button is enabled when you have entered new data or amended existing data.
	Cancel	Cancels changes made to the current data. This button is enabled when you have entered new data or amended existing data.
	Change Employee	Accesses the Employee Selection dialog box.
	Select	Displays the Selection List in the Message area. This button is enabled when there are multiple records for the form you have accessed.
	Clear Fields	Clear the data in the current record (form, table and so forth).
	Delete This Entry	Deletes the current selected record (form, table and so forth).

In addition, you can use your browser options to print your current work area, and to move backwards and forwards between previously accessed forms.

Options for updating data

When you access a form it will generally be populated with the most recently entered data. When you are entering new data on a form that already has data displayed on it, you have three choices:

- Clear all the data
- Clear existing data for specific text boxes
- Key over the existing data

Clearing all data boxes on a form

When entering new data, we recommend that you first clear the form to remove all the data from the text boxes. Clearing the form does not delete the existing information.

To clear a form, you use the Clear Fields button on the toolbar:

See also:

- Clearing all boxes on a form ***(on page 148)***

For detailed directions on clearing text boxes on a form.

Keying over existing data

You can enter new data on a form by keying over the existing data. However, if you do this, you run the risk of mixing up the existing data with the new data and saving the wrong data.

See also:

- Modifying a record ***(on page 159)***

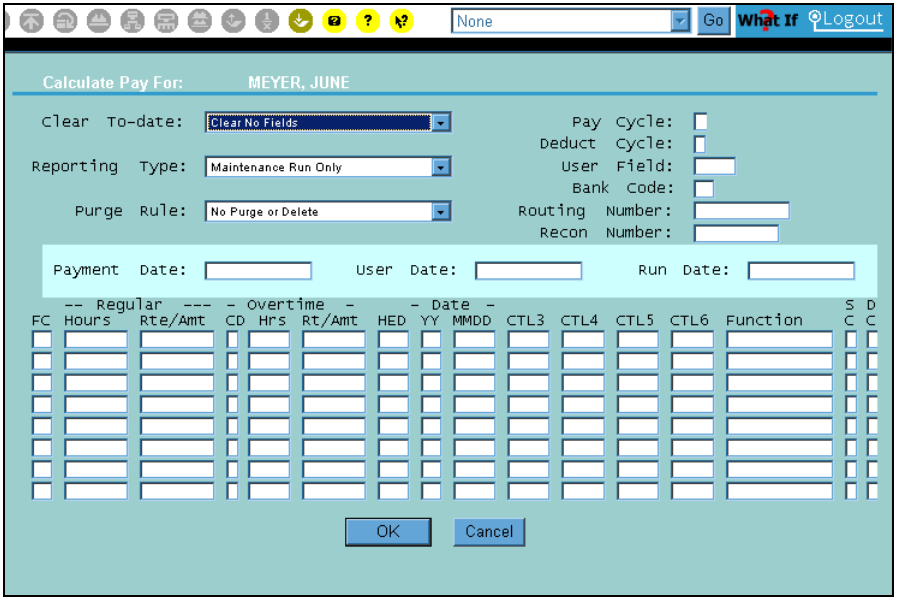
For detailed directions on modifying information on a form.

What-if and update modes

When you are in What-if mode, an icon will display beside the Logout button on the toolbar:

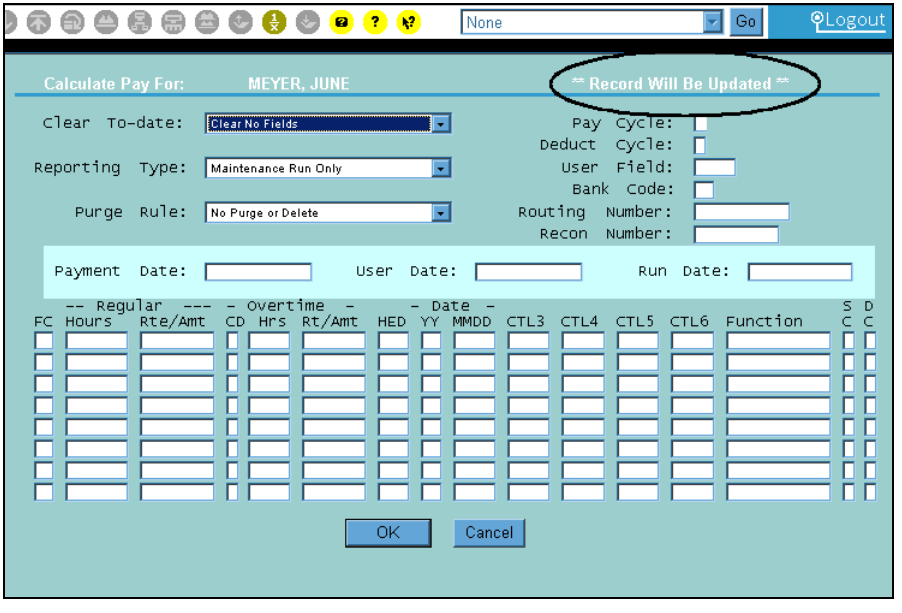
When used with the Calculate Pay For: form (PAY-CP), the what-if mode performs a simulated pay calculation, so that you can see what the pay document and stub will look like. What-if calculations do not update the Employee Database. Common uses of the what-if calculations include testing and verification of tax updates, changes in employee exemptions claimed or marital status, changes in pay rates, and so on. The results are provided immediately online, including a message about whether the payment was updated or not.

The following example shows the Calculate Pay For: form (PAY-CP) in what-if mode:



If you want to update the employee's record with a what-if payment, or if you want to enter a payment immediately, you must switch to update mode. In this mode, the employee's record will be updated, and a payment will be issued either immediately or during the next payroll run for the employee's frequency.

When you are in update mode, the form will have a warning at the top informing you that updates will be made to the record:



Use the Payroll buttons on the toolbar to toggle between the two modes. The three buttons on the toolbar for Payroll are:

-  What-If Mode
-  Update Mode
-  Restore Data

The Restore Data button will bring you back to Calculate Pay For: form (PAY-CP) with the original data.

☞ *Refer to the Payroll Employee Setup documentation for more information on the what-if and update modes.*

Record deletion

If a record is no longer required or an error was made when the data was originally entered, it is possible to delete the record. If an error was made on the original record, it should be possible to amend the record and then save the correct data. This is the recommended way of dealing with data errors.

A record can be deleted from the system by clicking the Delete button on the toolbar.

Note: Caution should be taken when you delete information from eCyborg.

See also:

- Keying over existing data ***(on page 133)***

For more information on how to amend data on a record.

- Deleting a record ***(on page 160)***

For detailed directions on deleting a record.

System messages

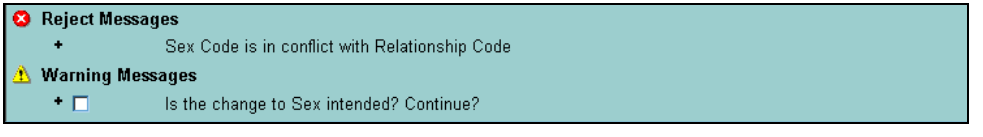
Three types of system messages can be displayed in the Message area:

- Reject
- Warning
- Information

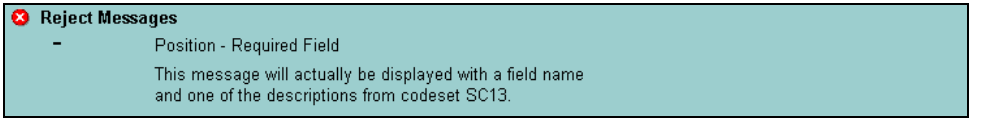
Note: This is the order in which the system will display the messages.

Overview of reject and warning messages

The system validates any data you enter into the system. If there is a problem with the data, a warning or reject message will be displayed in the Message area:



A brief explanation of the warning or reject message is displayed. If the reason for the warning or reject requires a more detailed explanation, you can click the plus sign (+) next to it. This expands the message to reveal a more detailed explanation.



Reject messages

A reject message occurs when data you have entered can not be accepted and is rejected. A reject message will also be displayed if you have not entered data in a required field. A reject message must be corrected before you can save the form.

There are two ways to deal with a reject message:

- Correct the data.
- Cancel the form. If you cancel the form you return it to its original condition. The data will not be saved.

See also:

- Responding to reject messages ***(on page 161)***

For detailed directions on responding to a reject message.

Warning messages

A warning message informs you that illogical data has been entered, that may or may not be correct.

There are three ways to deal with a warning message:

- Correct the data—Re-enter the correct data.
- Override the warning message—Override the warning message and accept the data by selecting the check box.
- Cancel the form—If you cancel the form, you return it to its original condition. The data will not be saved.

See also:

- Responding to warning messages ***(on page 163)***

For detailed directions on responding to a warning message.

Information messages

An information message is displayed when the system determines that an action you have performed should be brought to your attention. An information message is also used when a reject or warning message is displayed. The information message displays a generic explanation of these message types.

See also:

- Responding to reject messages ***(on page 161)***
- Responding to warning messages ***(on page 163)***

For detailed directions on displaying the additional information about the reject or warning message.

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Completing the Guided Practice

In the following task(s) you will display employee data for employee Steve Austin, whose Employee Number is 1234.

In order to complete the Guided Practice in the task(s), you first need to access the Employee Information form (EF-SCR) for Employee Number 1002 in organization 999999, ACME Manufacturing.

Access this form by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Employee Details
Task: Basic Employee Information

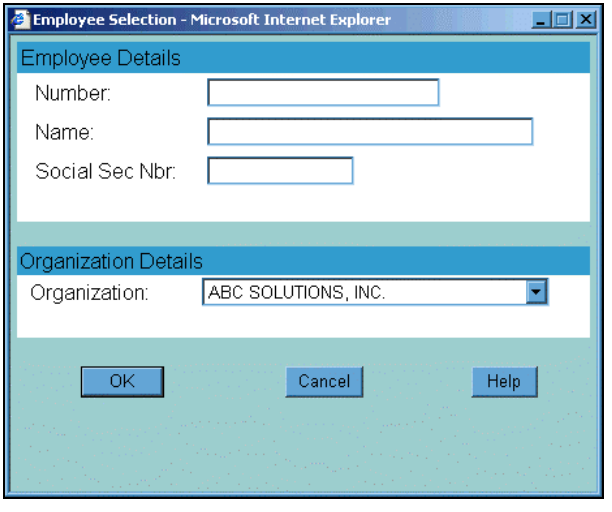
Displaying employee data using Employee Number, name or Social Security Number

To view data on a form for a different employee, follow these steps:

1. Click Change Employee

Click the Change Employee button to access the Employee Selection dialog box.

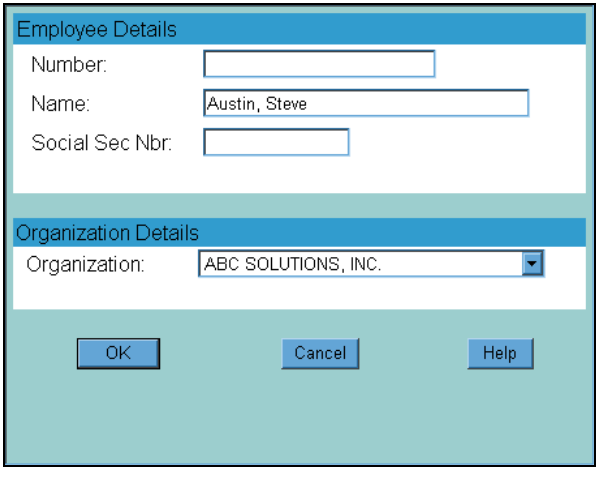
For practice, click Employee.



2. Enter a Number, Name, or Social Sec Nbr

Enter an employee Number, Name, or Social Security Number.

For practice, clear the Number text box and type 'Austin, Steve' in the Name text box.

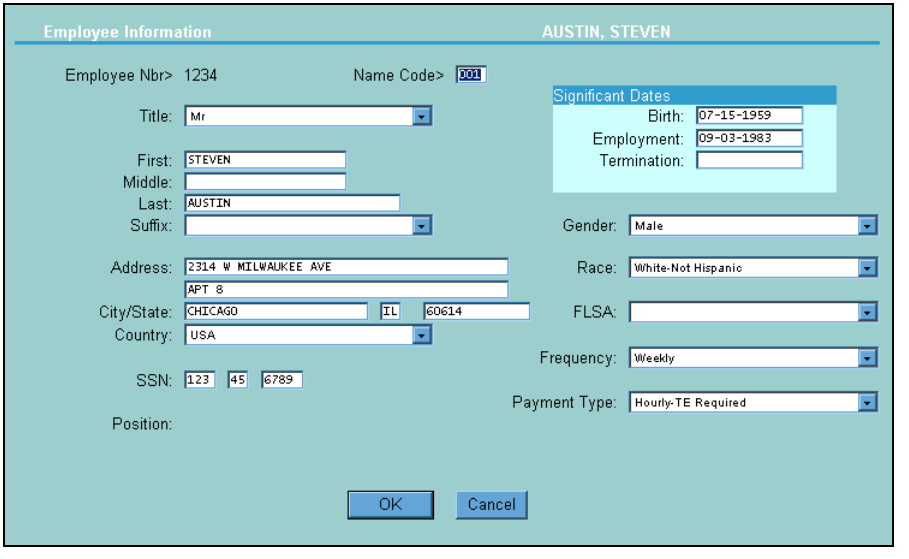


3. Click OK

To select the new employee, click OK.

For practice, click OK.

If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- Viewing data ***(on page 117)***

For more information on how to view employee data.

Displaying employee data using phonetic search

In this task, you are unsure of the correct spelling of an employee's last name and do not know the Employee Number. You will use the Employee Phonetic Name Lookup form (PHONET) to find out the employee's name and Employee Number. You are looking for an employee called either More or Moore.

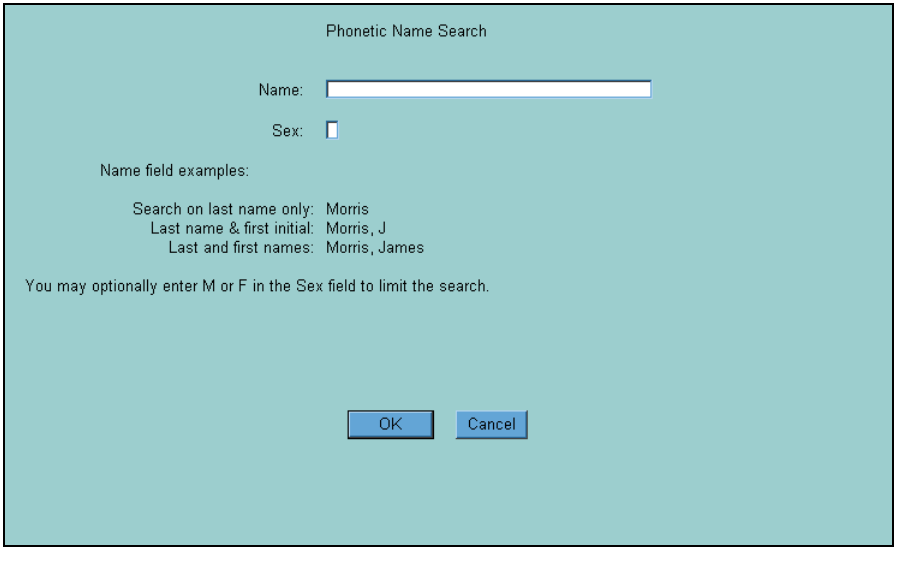
The Employee Phonetic Name Lookup form (PHONET) is useful if you are unsure of the spelling of an employee's last name. Any name that sounds close to your guessed spelling is displayed, so that you can find the correct spelling. This form is also useful if you have several employees with the same last name.

1. Access the Employee Phonetic Name Lookup form

Access this form by making the following selections from the Navigator:

Component: User Tools
Process: User Tools
Task: Employee Phonetic Name Lookup

For practice, access the Employee Phonetic Name Lookup form (PHONET).



2. Enter the Name

For the employee's name, you can enter one of the following:

- All of the employee's last name (Moore)
- Last name and first initial (Moore, S)
- Last and first names (Moore, Samuel)

Note: If you are using the employee's last name with either the first initial or first name, you must separate them with a comma.

Note: You must use the correct case (upper and lower) when entering employee names.

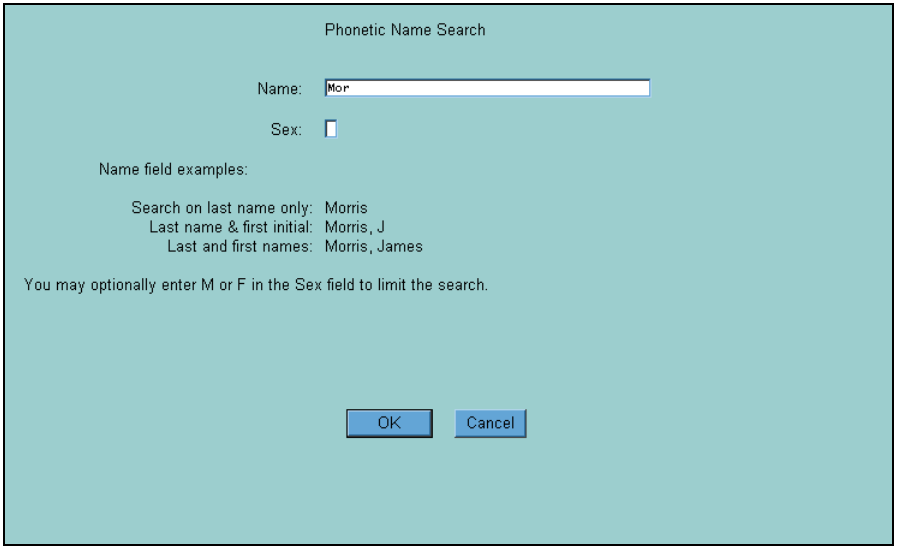
For practice, type 'More'.

3. Enter the sex of the employee (optional)

To limit the search to one particular gender, enter one of the following:

- M for male
- F for female

For practice, leave this text box blank.

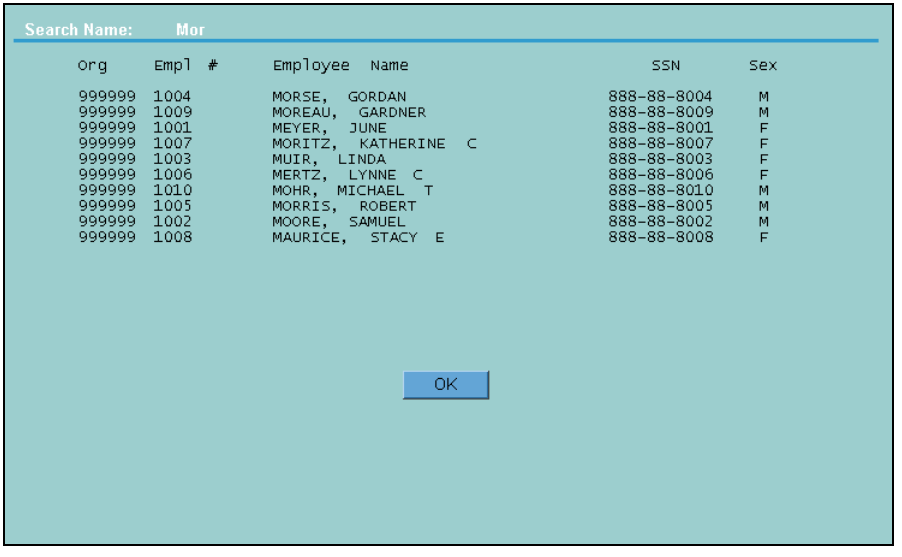


4. Click OK

To search for the employee, click OK. The results of your selection will be displayed.

For practice, click OK. From the results that are displayed, you can see that the correct spelling is Moore.

If you completed the Guided Practice, the results should look similar to the example that follows:



Note: *Clicking OK on the results form will take you back to the Employee Phonetic Name Lookup form (PHONET).*

See also:

- Viewing data ***(on page 117)***

For more information on how to view employee data.

Displaying a selection list in the Message area

In order to complete the Guided Practice in this task, you need to access the Salary Assignment/Changes form (40-SCR) for Employee Number 1234 in organization 999999, ACME Manufacturing.

If a form has multiple occurrences or historical records, they can be accessed using a Selection list.

Note: *In order to access a Selection list, the Select button must be enabled.*

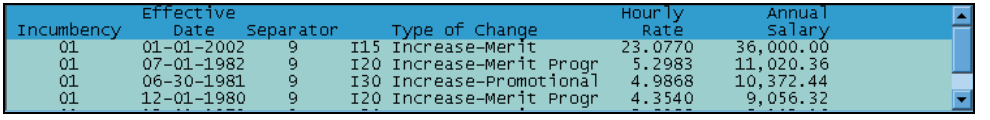
Access this form by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Salary Change

Click Select

Click the Select button to display the selection list in the Message area.

For practice, click Select. The selections will display in the Message area.



Incumbency	Effective Date	Separator	Type of Change	Hourly Rate	Annual Salary
01	01-01-2002	9	I15 Increase-Merit	23.0770	36,000.00
01	07-01-1982	9	I20 Increase-Merit Progr	5.2983	11,020.36
01	06-30-1981	9	I30 Increase-Promotional	4.9868	10,372.44
01	12-01-1980	9	I20 Increase-Merit Progr	4.3540	9,056.32

See also:

- Viewing multiple occurrences of data on a form ***(on page 120)***

For more information on Selection lists.

Choosing a record from a selection list

To complete the Guided Practice in this task, you need to have completed the Guided Practice in the task ***Displaying a selection list in the Message area*** (on page 144).

To select a record in a Selection list, complete the steps in this task. You can use the pointer to select a record, or you can use the Selection toolbar.

Select a record on the Selection list

Select a record on the Selection list by clicking anywhere on the record.

For practice, select a record.

See also:

- Viewing multiple occurrences of data on a form ***(on page 120)***

For more information on Selection lists.

Displaying an employee profile

In order to complete the Guided Practice in this task, you need to access the Online Employee Profile form (PROFIL) for Employee Number 1234.

You can use the Online Employee Profile form (PROFIL) to display a specific employee's master record from the Employee Database. You can choose to display the entire record or specific information such as Employee Relations.

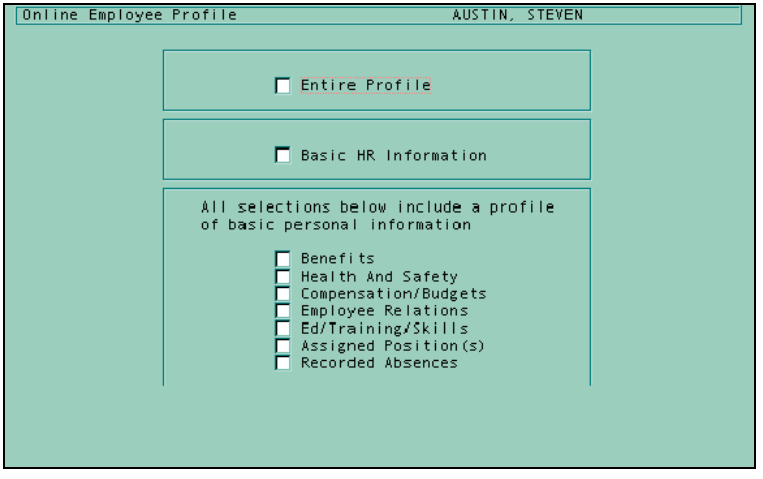
To display the employee profile, complete these steps:

1. Access the Online Employee Profile form

Access this form by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: View Employee Profile

For practice, access the Employee Profile form (PROFIL) for Employee Number 1234.



2. Select Entire Profile (optional)

If you want to display the entire profile for the employee, select this check box. If you select this option, you do not need to select any of the other check boxes.

For practice, select this check box.

3. Select Basic HR Information (optional)

If you want to display basic HR information for the employee, select this check box. In addition to basic HR information, you also have the option to select information from other categories by selecting the relevant check boxes.

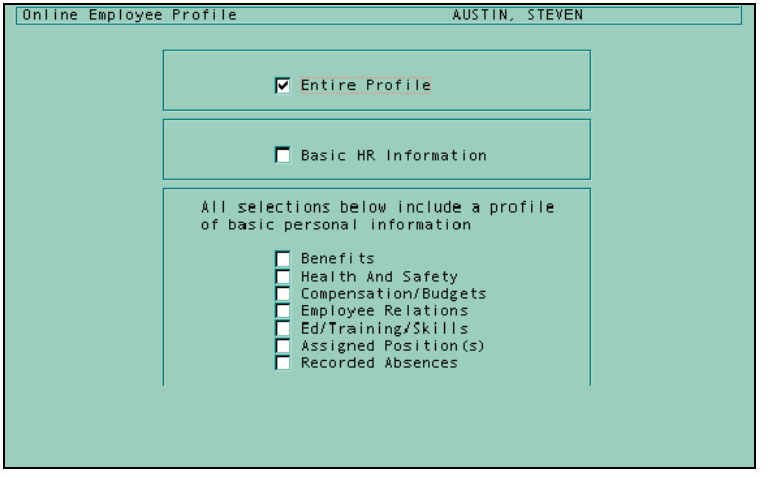
For practice, do not select this check box.

4. Select the type of information you want to display

Select the appropriate check box(es) for the type of information you want to display.

Note: If you have selected the Entire Profile option, you do not need to select these options.

For practice, do not select any of these check boxes.

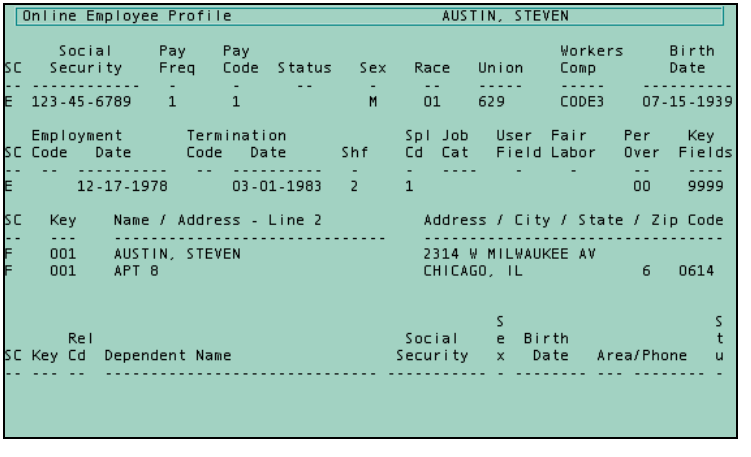


5. Click Save or press Enter

To display the employee profile using your selection criteria, click Save.

For practice, click Save.

If you completed the Guided Practice, the results should look similar to the example that follows:



6. Press Enter

The Online Employee Profile is a multi-page form. Press Enter to view the next page.

When you reach the end of the Online Employee Profile, the following message is displayed:

'----Complete----'

For practice, press Enter.

See also:

■ Employee Profiles ***(on page 121)***

For more information about employee profiles.

Clearing all boxes on a form

Access the Spouse/Dependent Information form (10-SCR) for Employee Number 1234.

It is good practice to clear existing data from a form before you enter new data. To clear a form use the Clear button.

Access this form by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Dependent Information

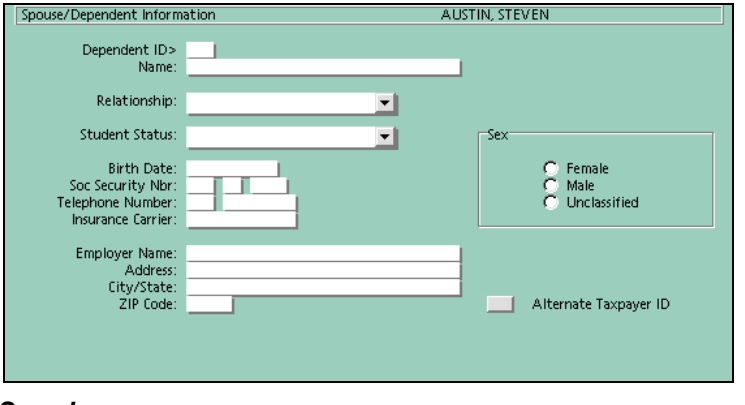
Click Clear Fields

Click the Clear Fields button to clear the data from the form.

Note: This button is enabled only when a form is selected.

For practice, click Clear Fields.

If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

■ Options for updating data ***(on page 132)***

For more information about clearing data from a form.

- System messages ***(on page 137)***

For information on messages that could be displayed when you try to save a record.

Entering numeric data

In this task, you are going to change the following information in the Employee Information form (EF-SCR) for Employee Number 1234.

Change the Soc Security text box to 987-65-4321.

When you have completed the Guided Practice, click the Cancel button to abandon the changes.

To enter numeric data, complete the following steps:

Note: *This example does not contain decimals. When you enter data into a field that uses decimal places, you must enter it using the correct format.*

Access this form by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Basic Employee Information

1. Select a numeric text box

Select a numeric text box that requires a numeric entry.

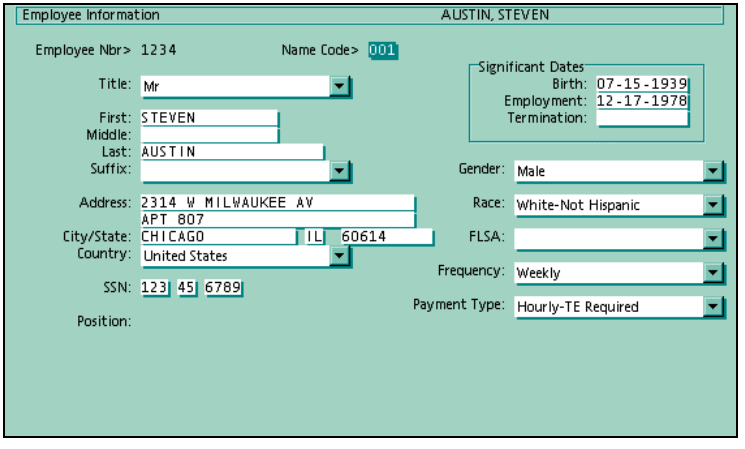
For practice, select the Soc Security text box.

2. Enter the numeric data

Enter the numeric data in the correct format. If the numeric text box uses decimal places, you must use the correct format to enter the data. Different types of numeric data include rates, hours, percentages, and salaries. Each of these types of numeric data have specific formats when decimals are used.

For practice, type '987-65-4321'.

If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- Numeric text boxes ***(on page 125)***

For more information on entering numeric data.

- System messages ***(on page 137)***

For information on messages that could be displayed when you try to save a record.

Selecting an option from an option list

An option list contains a list of predefined options from which to choose. You must select one of the predefined options. There are two types of option lists:

- Option lists (this task)
- ***Big option lists*** (see "Selecting an option from a big option list" on page 151)

In this task, you are going to change the following information in the Employee Information form (EF-SCR) for Employee Number 1234.

Change the Frequency option list (PP29) to Monthly.

When you have completed the Guided Practice, click the Cancel button to abandon the changes.

To select an option from an option list, complete the following steps:

Access this form by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Basic Employee Information

1. Select an option list

Select an option list from which you want to select an option.

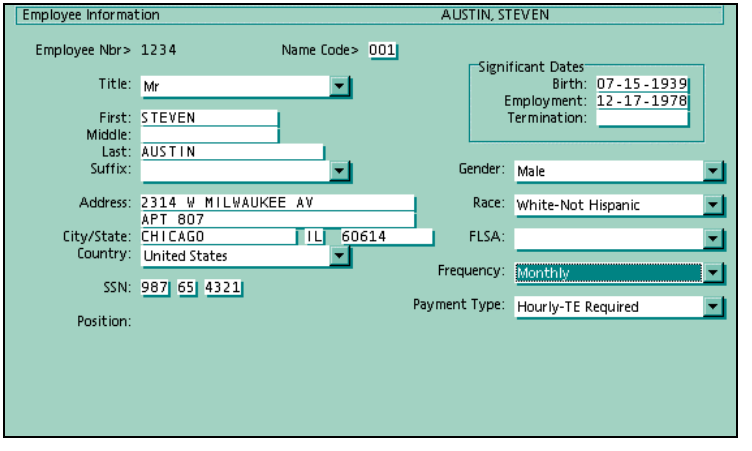
For practice, select the Frequency option list (PP29).

2. Click the drop-down arrow and select an option

Click the drop-down arrow to display the option list and select an option.

For practice, click the drop-down arrow and select the option Monthly.

If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- Option lists ***(on page 127)***
- Standard option list ***(on page 128)***

For more information on option lists.

Selecting an option from a big option list

In this task, you are going to change the following information in the Certificates, Licenses and Permits form (28-SCR) for Employee Number 1234.

- Change the Type of CLP option list (HR59) to Physical Therapist.

When you have completed the Guided Practice, click the Cancel button to abandon the changes.

An option list contains a list of predefined options from which to choose. You must select one of the predefined options. There are two types of option lists:

- ***Option lists*** (see "Selecting an option from an option list" on page 150)
- Big option lists (this task)

To select an option from a big option list, complete the following steps:

Access the Certificates, Licenses and Permits form (28-SCR) by making the following selections from the Navigator:

Component: Employee Development
Process: Employee Skills, Competencies, Training
Task: Certificates, Licenses and Permits

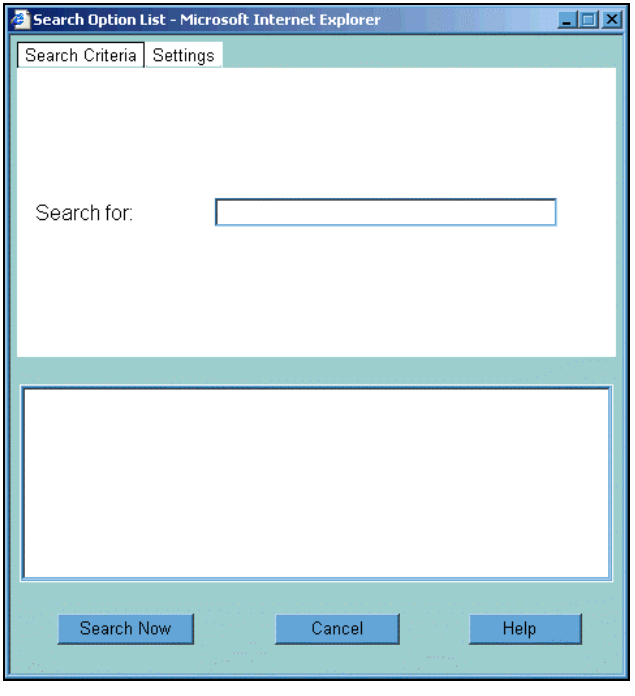
1. Select an option list

Select an option list from which you want to select an option.

For practice, select the Type of CLP option list (HR59).

2. Click the ellipsis

Click the ellipsis to select the Search Option List dialog box.



3. Enter an option

Enter the name of the option you want to select. You can enter the entire name of the option or just the first few characters.

For practice, type 'phy'.

4. Click the Settings tab (optional)

Click the Settings tab. Select the appropriate options on this tab to refine your search.

For practice, do not click the Settings tab.

5. Click Search Now

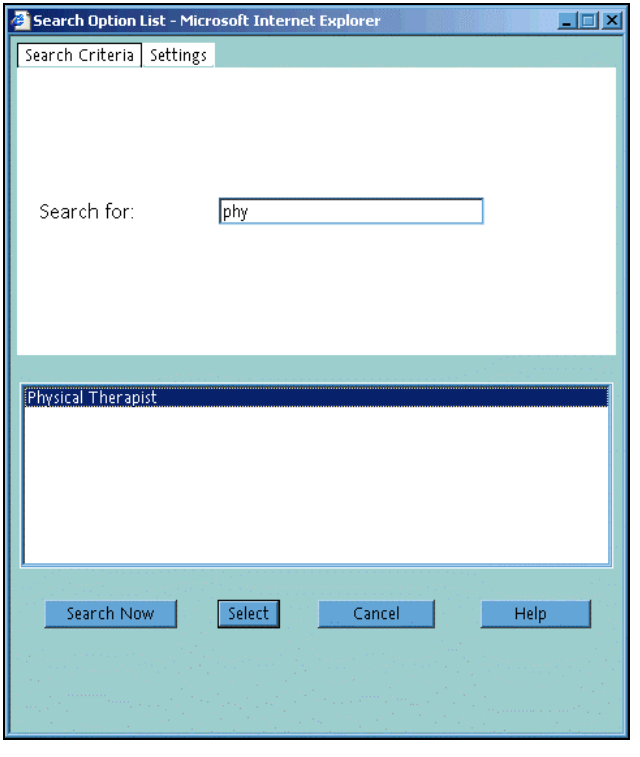
Click the Search Now button to find the option you entered.

For practice, click Search Now.

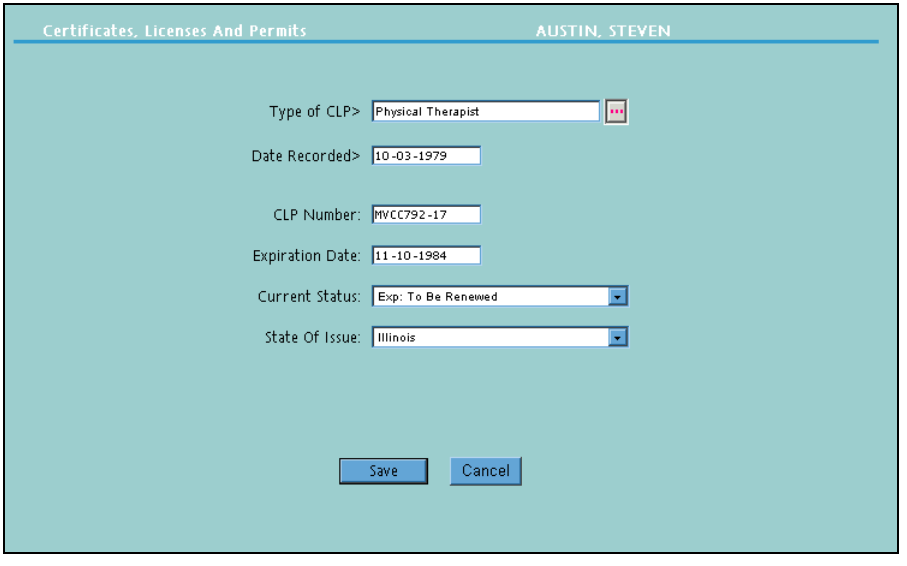
6. Select your option

Select the option for which you were searching and click the Select button. The option will be displayed in the big option list.

For practice, select Physical Therapist.



If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- Option lists ***(on page 127)***
- Big option list ***(on page 128)***

For more information on option lists.

Saving changes to a form

In this task, you are going to change the following information in the Employee Information form (EF-SCR) for Employee Number 1234. You will then save the form.

Change the Zip Code to 60606.

When you have entered data on a form you will need to save it. To save a form complete the following steps.

Access the Employee Information form (EF-SCR) by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Basic Employee Information

1. Enter new data or amend existing data on a form

When you enter new data or amend existing data on a form, the Save button will be enabled.

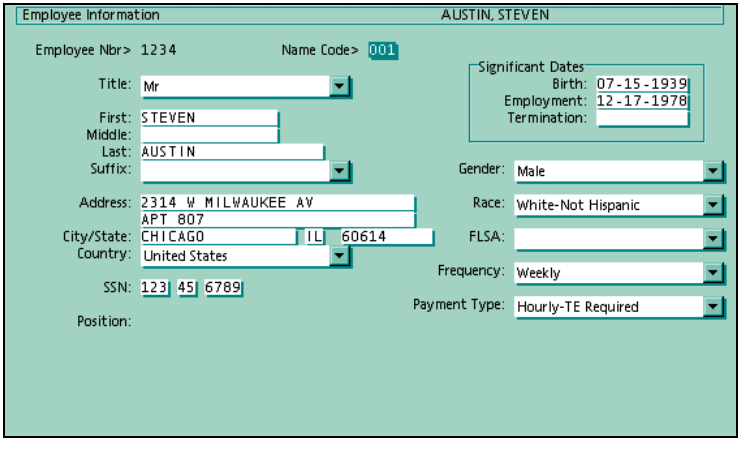
For practice, change the Zip Code to 60606.

2. Click Save

Click the Save button to save the changes you have made to a form.

For practice, click Save.

If you completed the guided practice, the results should look similar to the example that follows:



See also:

- System messages ***(on page 137)***

For information on messages that could be displayed when you try to save a record.

Canceling changes to a form

If you enter data on a form and then decide that you do not want to save the data, you need to click the Cancel button to discard the data.

The Cancel button is enabled when you enter new data or amend existing data.

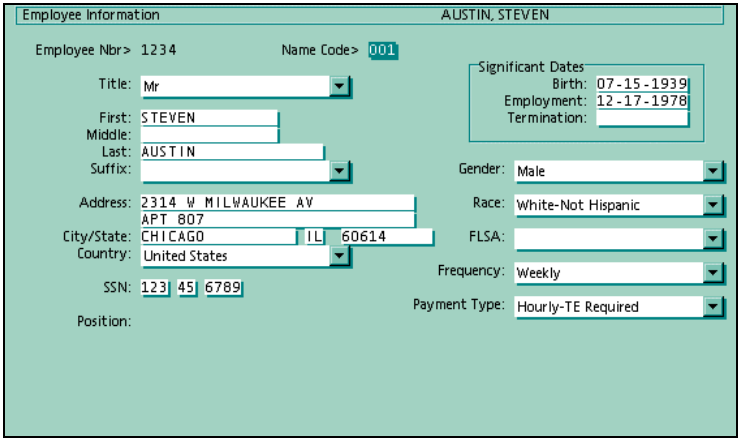
To use the Cancel button, complete the following steps.

In this task, you are going to change the following information in the Employee Information form (EF-SCR) for Employee Number 1234.

Change the Payment Type to Salary-Auto Paid.

Access the Employee Information form (EF-SCR) by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Basic Employee Information



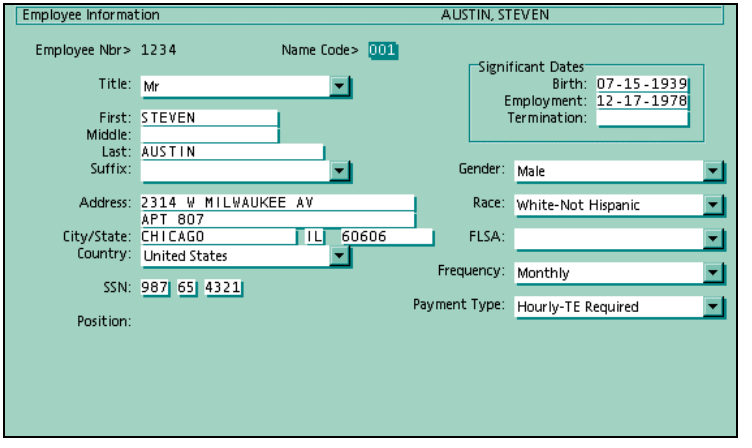
Click Cancel

If you enter new data on a form and want to discard the data, click the Cancel button.

If you amend existing data on a form and want to return to the original settings, click the Cancel button.

For practice, click Cancel.

If you completed the Guided Practice, the results should look similar to the example that follows:



Adding a record

In this task, you are going to add a new record to the Spouse/Dependent Information form (10-SCR) for Employee Number 1002. Complete this form as shown. Before you enter this data, use the Clear button to start with a blank form.

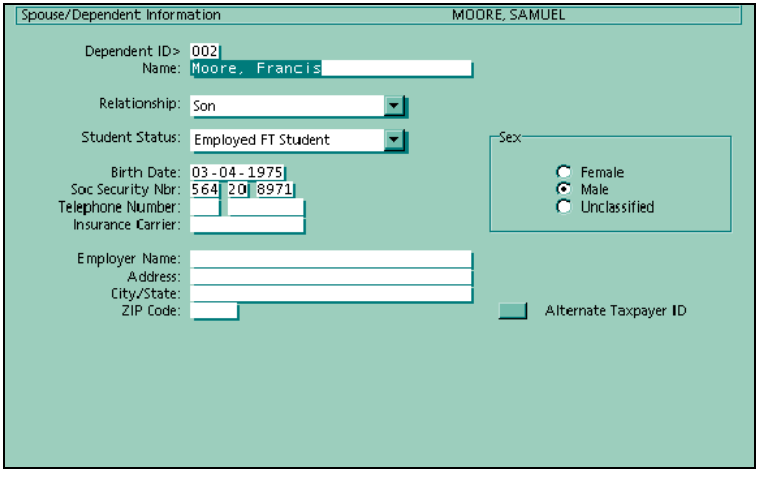
To add a new record to eCyborg, complete these steps:

1. Access a form

Access the form to which you want to add a new record by using the Navigator.

For practice, access the Spouse/Dependent Information form (10-SCR) for employee 1002 by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Dependent Information



2. Enter the new data

Enter the new data on the form.

For practice, type the following data.

Text Box	Data
Dependent ID	002
Name	Moore, Francis
Relationship	Son
Student Status	Employed FT Student
Birth Data	03-04-1975
Soc Security Nbr	564-20-8971
Sex	Male

3. Click Save

Click the Save button to save the information.

For practice, click Save.

See also:

- Adding and modifying data ***(on page 124)***

For more information on entering data.

- System messages ***(on page 137)***

For information on messages that could be displayed when you try to save a record.

Modifying a record

In this task, you are going to modify the Spouse/Dependent Information form (10-SCR) for Employee Number 1002.

To complete the Guided Practice in this task, you need to have completed the Guided Practice in Task 12.

After you have created a form, you can modify the information on it at any time.

1. Access the form you want to modify

Access the form you want to modify by using the Navigator.

For practice, access the Spouse/Dependent Information form (10-SCR) for employee 1002.

Access this form by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Dependent Information

2. Modify the information

Modify the information on the form. You can:

- Type over all the existing data.
- Type over data in specific fields.

If necessary, you can clear all the data and start with a blank form.

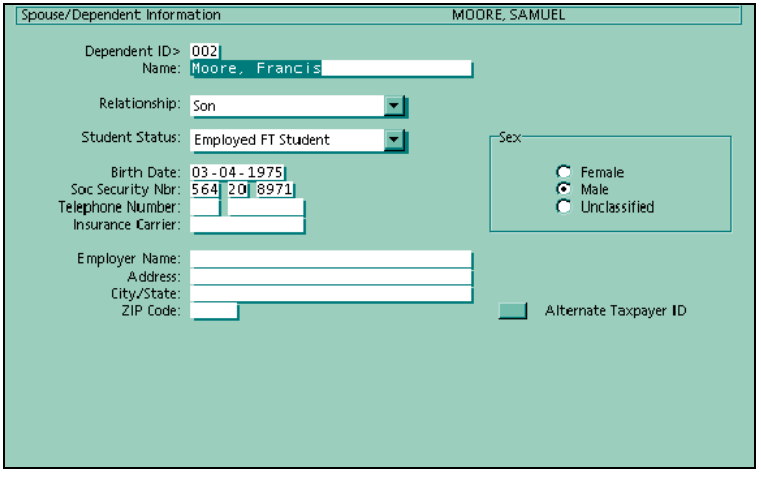
For practice, change the Student Status to None.

3. Click Save

Click the Save button to save the information.

For practice, click Save.

If you completed the Guided Practice, the results should look similar to the example that follows:



See also:

- Adding and modifying data ***(on page 124)***

For more information on modifying data.

- System messages ***(on page 137)***

For information on messages that could be displayed when you try to save a record.

Deleting a record

In this task, you are going to delete the Spouse/Dependent Information form (10-SCR) for Employee Number 1002.

To complete the Guided Practice in this task, you need to have completed the Guided Practice in the task ***Adding a record*** (on page 157).

If you need to delete a record, complete the following steps:

Note: *Caution should be taken when you delete information from the system.*

1. Access the form you want to delete

Access the form you want to delete by using the Navigator.

For practice, access the Spouse/Dependent Information form (10-SCR) for employee 1002.

Access this form by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Dependent Information

2. Click Delete This Entry

To delete the form, click the Delete This Entry button.

For practice, click Delete This Entry.

3. Click OK

To confirm that you want to delete the form, click the OK button.

For practice, click OK.

See also:

- Record deletion ***(on page 136)***

For more information about deleting a record.

Responding to reject messages

A reject message displays in the Message area in response to incorrect information you enter on a form. To respond to a reject message, complete the steps in this task.

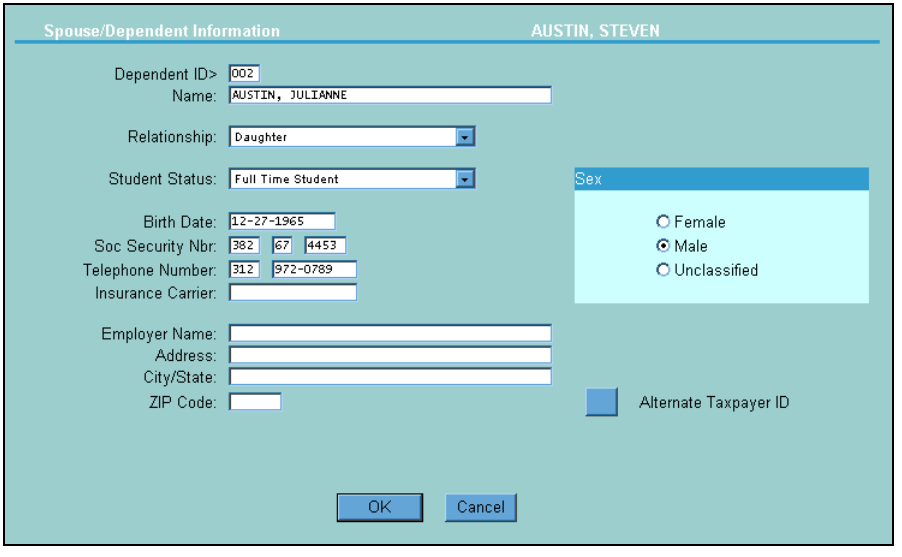
In this task, you are going to modify the Spouse/Dependent Information form (10-SCR) for Employee Number 1234.

In order to see an example of a reject message, you are going to change the gender status for Julianne Austin from Female to Male.

Access the Spouse/Dependent Information form (10-SCR) by making the following selections from the Navigator:

Component:	Employee Resourcing
Process:	Maintain Basic Employee Details
Task:	Dependent Information

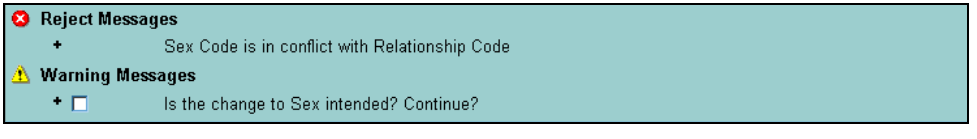
Change the dependent's gender to Male, and click Save.

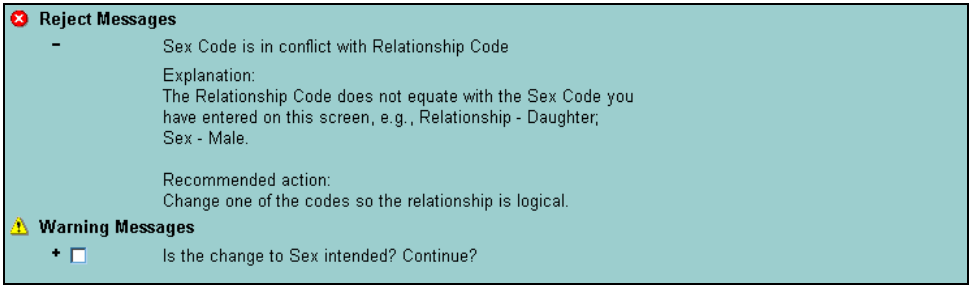


1. Click the plus sign (+) to reveal additional information about the reject message

Additional information about reject message can be displayed by clicking the plus sign (+).

For practice, click the plus sign (+).





2. Read the reject message

Read the reject message and take the appropriate action. You can do one of the following:

- Correct the error(s)
- Click Cancel to cancel the form

For practice, click Cancel.

See also:

- System messages ***(on page 137)***

For more information on system messages.

Responding to warning messages

A warning message displays in the Message area in response to information you enter on a form. To respond to a warning message, complete the steps in this task.

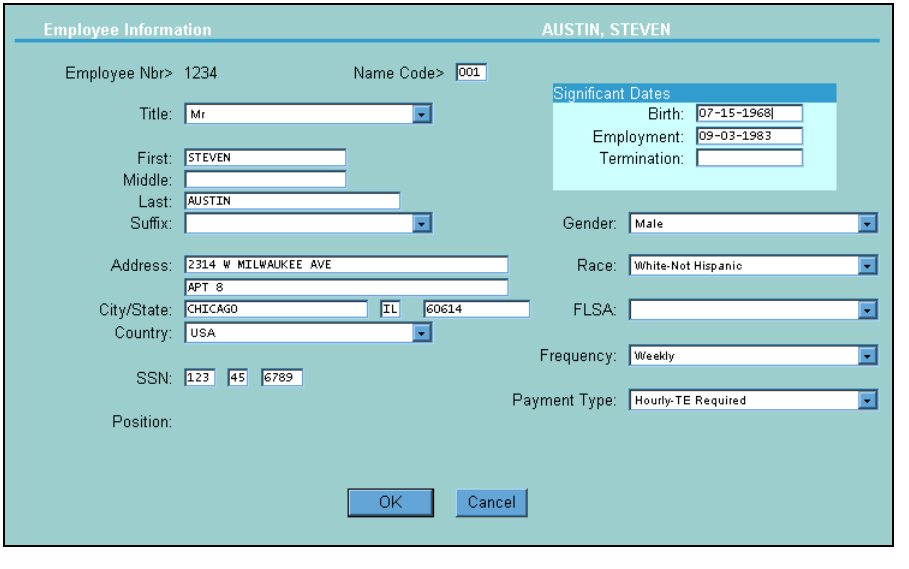
In this task, you are going to modify the Employee Information form (EF-SCR) for Employee Number 1234.

In order to see an example of a warning message, you are going to change the age of the employee so that the employee was under 13 when they started employment.

Access the Employee Information form (EF-SCR) by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Basic Employee Information

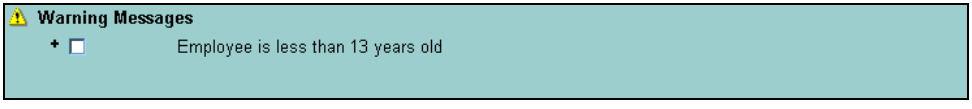
Change the employee's date of birth to 07-15-1968 (US and Canada, excluding Quebec) or 15-07-1968 (elsewhere) and click Save.

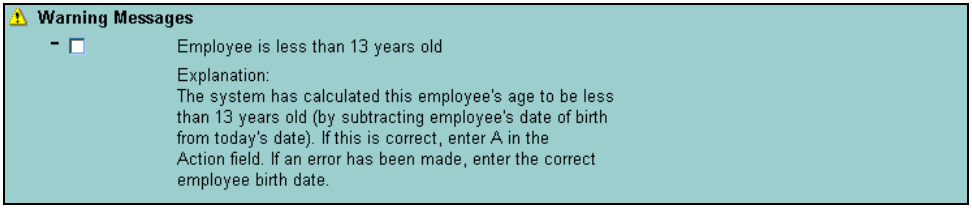


1. Click the plus sign (+) to reveal additional information about the warning message

Additional information on the warning message can be displayed by clicking the plus sign (+).

For practice, click the plus sign (+).





2. Read the warning message

Read the warning message and take the appropriate action. You can do one of the following:

- Correct the warning(s) and save the form
- Click Cancel to cancel the form
- Select the check box and click Save to accept the warning

For practice, click Cancel.

See also:

- System messages ***(on page 137)***

For more information on system messages.

Review of Questions Answered

1. What methods are available for viewing employee and organizational data?

2. What types of numeric data are used?

3. What are option lists and how are they used?

4. What actions can be performed when working with forms?

5. How are employee and organizational data deleted?

6. What types of system messages are provided?

PART 3

Appendices

In This Section

APPENDIX A

Dialog Quick Reference

In This Appendix

Dialog boxes

This section provides a quick reference guide to dialog boxes in eCyborg.

Contents

Change password (PASS-P)

Your password is entered when you log on to eCyborg. It can be changed at any time.

Your password is case sensitive (upper case, lower case). You must enter your existing password using the correct case. You can enter your new password using either case (upper or lower) or a mixture of both. For security purposes when you enter your password, it is displayed as a series of asterisks.

See also:

■ Changing your password ***(on page 30)***
To learn how to change your password.

Change user code (PASS-U)

You can change your user code at any time, or eCyborg may be set up to prompt you to change your user code on a periodic basis.

Your user code is case sensitive (upper case, lower case). You must enter your existing user code using the correct case. You can enter your new user code using either case (upper or lower) or a mixture of both.

See also:

■ Changing your user code ***(on page 29)***
To learn how to change your user codes.

Command Entry

Use the Command Entry dialog box to enter the IDs of forms, queries, other programs, and other parameters that may be required. When you choose the OK button, the command constructed from your entered parameters is executed.

Command Entry contains:

- Organization
- Program
- Key
- Additional Key
- Codes 1-2
- Action

Organization

If it is not already displayed in the text box, enter the ID of the company whose information you want to enter/and or display.

Program

Enter the ID of the form you want to display or the query or program to execute.

Key

Type the key value (for example, Employee Number). The system uses the values in the Program and Key text boxes to display the form and data you requested. The value in the Key text box must be consistent with the requirements of the form you requested.

Additional Key

Use this text box to continue the entry made in the Key text box when the entry is too long to fit in just the Key text box. You may also make an entry in the Additional Key text box to specify a special value required for processing the form or program.

Codes 1-2

If required, type a Code1 value in the first character position and/or a Code2 value in the second character position of this text box. Code1 valid entries are E or blank (Default), I for inquiry, and K for a 'what-if' mode. Code2 valid entries are U go to the next form in the stack, S same segment, B go back to the previous form in the stack, and F go to the first in the stack. P can be entered in either text box to print the form to an audit file.

Action

If required for the form or program you are asking to use, enter an action command code of A or Q in the Action text box. Enter A (for Accept) to override a warning and update the Employee Database with the form information. Enter Q (for Quit) to ignore all entries made on the form and leave the Employee Database untouched.

Customize bookmarks and favorites

Since bookmarks give you quick access to forms, you should consider adding bookmarks for the forms that you use often to the Navigator. This will increase your efficiency by allowing you to access a form with just one mouse click.

When you add a bookmark, the name that is added to the Bookmarks list is that of the form. You must first access the form using the Navigator. Then, you use the Add/Remove bookmarks option to add the form. The form is then added and displayed in the Navigator.

You can edit a bookmark. Using the Customize bookmarks dialog you can change the name. You may want to change the name to something that is more meaningful to you.

If your job responsibilities or day-to-day tasks change, you may want to remove a bookmark that accesses a form. When you remove a bookmark, the system will display a warning message, prompting you to confirm the removal.

See also:

- Adding a bookmark ***(on page 75)***

To learn how to add a form as a bookmark.

- Accessing a bookmark ***(on page 77)***

To learn how to access a previously defined bookmark.

eCyborg Login

Logging on to eCyborg is a very simple task. However, before you can log on, your Security Officer will need to give you a user code and a password. You will need to enter these when you sign on, as they identify you to the system.

To log on to eCyborg you must enter the following three pieces of information:

- Your user code
- Your password
- Your environment

Your user code and password are used for security purposes and should not be written down or revealed to anyone.

Typically an organization will have two environments, a test environment that is used by new users while they learn how to use eCyborg and a live environment that contains your organization's data.

Your organization may have other environments such as a test environment for year-end testing. When you log on to eCyborg, you must select which environment you want to use. The next time you log on, the system 'remembers' the environment you last accessed.

When you have completed the log on process the Work Area should be displayed.

See also:

- Logging on to eCyborg ***(on page 27)***

To learn about logging on to eCyborg.

Employee Lookup

Use this dialog to lookup an employee by name.

After you type the first couple of characters of the employee's name and pause, the system will search for names that start with those characters and display them in the list.

Enter the name in one of the following formats:

- Three or more letters of the employee's last name (Moore)
- Last name and first initial (Moore, S)
- Last and first names (Moore, Samuel)

Note: If you are using the employee's last name with either the first initial or first name, you must separate them with a comma.

Note: You must use the correct case (upper and lower) when entering employee names.

If the employee you are looking for is displayed in the list, select it by clicking it, and then click the To: or cc: button.

Employee Selection

If you have more than one organization established, you will need to be able to switch between these organizations easily and quickly. Within these organizations you will also need to switch between different employees just as easily.

For example, if you need to enter salary information for a number of employees, you will want to be able to switch employees after you complete a Salary Assignment/Changes form for each of them.

To switch between organizations and employees, you use the 'Employee Selection' dialog box. To access this dialog box, click the Employee button on the toolbar.

Accessing employee data

In order to view a record for an employee, you need to identify to the system which employee's record you want to access.

There are a number of different ways to access an employee's record. You can access an employee's records by entering the relevant information in one of three text boxes in the Employee Selection dialog box.

- Number—the Employee Number
- Name—the employee's name
- Social Sec Nbr—the employee's Social Security Number

You must then select which organization the employee belongs to.

When you have entered the relevant information, click OK to access the employee's record.

When you enter an employee's name, you can enter either the complete name using the correct mix of upper and lower case, or just the last name. If you enter the employee's last name the Select an Employee dialog box will display, from which you can select the exact employee and access his or her record.

See also:

- Changing to a different employee or organization ***(on page 83)***

To learn how to use the Employee Selection dialog box to change employees or organizations.

- Displaying employee data using Employee Number, name or Social Security Number ***(on page 139)***

To learn how to display employee data using various methods.

New Hire Details

You use templates called logical employee models when processing new hires. Each logical employee model contains default information to make the process more efficient. Your organization can have many logical employee models. When you process a new hire, you must identify the organization and which logical employee model is to be used.

If you create a checklist that processes new hire information, you must identify it as such. Doing so causes special processing to occur that allows the person using the checklist to select the organization and logical employee model to use with the new hire.

When you identify a checklist as a new hire checklist, a New Hire Details dialog box displays first when the checklist is accessed.

☞ *Refer to the Using The Solution Series: Administrative Solutions documentation to learn how to create a universal or personal checklist.*

Resume A Checklist

You can pause a checklist for a number of reasons. For example, if you are using the New Hire checklist and you do not have the employee's birth date, you could pause the checklist and complete it at a later date when you have the information.

A paused checklist can be accessed in the following ways:

- When you log on to eCyborg
- From the Navigator

To resume a checklist, select it and click Resume.

See also:

- Pausing a checklist ***(on page 80)***

To learn more about how to pause a checklist.

- Resuming a paused checklist ***(on page 81)***

To learn more about how to resume a checklist.

Search Option Lists

When you access a big options list, eCyborg will display the Search Option List dialog box.

The Search Option List dialog box contains two tabs, Search Criteria and Settings.

Search Criteria

The Search Criteria tab contains the Search for text box. To search for an option enter either its complete name or part of its name. For example you could enter all or part of the name the educational establishment you want to select.

When you have entered an option, you can click the Search Now button, or you can refine your search using the options on the Settings tab.

Settings

In the Options group box you can choose to search for an option that either starts with or contains your selection on the Search Criteria tab.

In the Search Items group box you can choose search for a description of the educational establishment or code.

In the Display group box you can choose the Codes check box to display the code for each educational establishments.

In the Sort Order group box you can choose to sort the educational establishments alphabetically by code or description.

If you have used the Settings tab to refine your search, click the Search Now button to begin the search.

If eCyborg finds an option(s) that matches your selection, the Search Option List dialog box expands to reveal the results.

If your option is displayed, you can select it and click the Select button.

If your selection is not displayed, you can try again by entering a new option in the Search for text box.

When you have highlighted your option, click Select to insert it into the option list.

See also:

- Selecting an option from an option list ***(on page 150)***
- Selecting an option from a big option list ***(on page 151)***

To learn how to use option lists.

APPENDIX B

Practice and Review Answers

In This Appendix

Introduction

This appendix provides answers for the Apply the Concept questions, Review of Questions Answered and Extended Practice questions that are included in each instructional chapter.

Getting Started

Review of Questions Answered

1. What information must you have before you can log on?
   A user code, password and environment.
2. How can user codes and passwords be used as part of your organization's security strategy?
   Each user of eCyborg should be given an individual user code and password. The system will only allow someone to log on when they have entered the correct user code and password. A user has three attempts to log on to the system. If they do not enter the correct user code or password on the third attempt they will not be allowed to log on. The system can be set up to prompt the user to change their user code on a regular basis. To ensure that only authorized users access eCyborg a user should not reveal their user code or password to anyone else.
3. How do you log out of the system?
   You use the Logout button on the toolbar to log out of the system.

Exploring the Work Area

Review of Questions Answered

1. What is the Work Area?
   The Work Area describes the entire display area that you see after you log on to eCyborg.
2. What is the Navigator?
   The navigator is the method of accessing different components and forms. It is the pane on the left side of your Work Area.
3. What is the Form Area?
   When you have navigated to a component and selected a form, it will be displayed in the Form area, to the right of the Navigator.
4. What is the Message area?
   The Message area is used to display two types of information.

   First, it is used to display information, warnings and reject messages in response to information that you have entered on the form.

   Second, it displays a selection list for forms that have multiple occurrences of the same type of information. You can use a selection list to choose the record that includes the information you want to work with.
5. What is a user profile?
   A user profile is used for security purposes to determine what you can and can not do while you are using eCyborg, and which parts of the system you can access.

Navigating the System

Review of Questions Answered

1. How is the Navigator organized?
   The Navigator is made up of these three levels:
   - *Components*
   - *Processes—each process is associated with a component*
   - *Tasks—each task is associated with a process*

2. What effect does your user profile have on information you can access?
   Your user profile determines what you can and can not do while using eCyborg, and which parts of the system you can access.

3. How would you switch between forms?
   Your browser's Back and Forward buttons are a quick way to switch between forms

4. What are checklists?
   A checklist provides a way to link different items (forms, dialog boxes, checklists) to create a workflow. Each of these items can then be completed consecutively, using the checklist to navigate them.

5. What method is provided to allow the selection of a different employee?
   To switch between organizations and employees, you use the Employee Selection dialog box.

Using the Support Tools

Review of Questions Answered

1. What types of online help are provided?
   The Help system contains modular help files that allow you to access help for the entire system and standard XHTML help on each component of the system. The help files contain cue cards, conceptual information,and quick reference information.
2. What is the Help menu?
   The Help menu consists of the help system, allowing you to navigate around all of the delivered help files.

Working with Data

Review of Questions Answered

1. What methods are available for viewing employee and organizational data?
   You can access an employee's records by entering the relevant information in one of three text boxes in the Employee Selection dialog box:
   - *Number—employee's Number*
   - *Name—employee's name*
   - *Social Sec Nbr—employee's Social Security Number*

2. What types of numeric data are used?
   - *Rates*
   - *Hours*
   - *Percentages*
   - *Amount/Salary*

3. What are option lists and how are they used?
   An option list contains a list of predefined options for you to choose from. You must select one of the predefined options as your selection. In contrast to a character text box, you can not key your own data into an option list

4. What actions can be performed when working with forms?
   The following actions can be performed when working with forms:

Button	Name	Description
	Save	Saves the current data. This button is enabled when you have entered new data or amended existing data.
	Cancel	Cancels changes made to the current data. This button is enabled when you have entered new data or amended existing data.
	Change Employee	Accesses the Employee Selection dialog box.
	Select	Displays the Selection List in the Message area. This button is enabled when there are multiple records for the form you have accessed.
	Clear Fields	Clear the data in the current record (form, table and so forth).
	Delete This Entry	Deletes the current selected record (form, table and so forth).
	Bookmarks	Adds the current form to the Bookmarks area of the Navigator.

In addition, you can use your browser options to print your current work area, and to move backwards and forwards between previously accessed forms.

5. How are employee and organizational data deleted?
   Employee and organizational data can be deleted from the system by clicking the Delete button on the toolbar.

6. What types of system messages are provided?
   - *Reject*
   - *Warning*
   - *Information*

Glossary of Terms

.EXE
A binary file containing a program in machine language that is ready to be executed.

.INI
A file that contains the parameters (values) used by the .exe file (program).

360-degree appraisal
Appraisals that include evaluations from an employee's managers and supervisors, peers, subordinates, and even customers, clients, and suppliers.

Absence data
Employee-level absence information that is entered on the absences forms.

Absence point
User-defined number that may be assigned for a particular absence and that can be totaled over time to determine if an employee is within the accepted number of absences for a time period.

Absence type
A classification of an employee absence, such as 'jury duty' or 'sick'. Employee absences are recorded by date and absence type.

Account timeout
The period of time that elapses before a user's account becomes invalid because of inactivity.

Accumulator id
A three-position, alphanumeric identifier for a benefits accumulator.

Acrobat
A suite of programs developed by Adobe Systems, Inc. For creating and distributing electronic documents. Programs in the suite allow you to create a portable document format (PDF) file for a document. You can then distribute the PDF file electronically to people who view the document with their freely distributed acrobat reader. People viewing a PDF file (or document) with the Acrobat Reader see the document with the exact layout intended by the author.

Action button
An action button performs an action such as saving the information you entered or telling the system you finished reviewing a page. An action button consists of an icon (or button) accompanied by underlined text (link text). For example, at various places throughout eCyborg Interactive Workforce you may see an action button displaying a check mark accompanied by the underlined text 'save changes'. You can click either the text or the button to save your changes to the page.

Activity code
Describes the clock transaction (ring) activity, such as clock start or meal end.

Activity types
With the time and attendance solution, you can set up the system so that an employee or group of employees may clock in and out for up to eight different activities: clock-in (1), break 1 start (2), break 1 end (3), meal start (4), meal end (5), break 2 start (6), break 2 end (7), and clock end (8).

Actuarial valuation
An examination of a pension plan to determine if contributions are being accumulated at a rate sufficient to pay the promised pensions.

Administration home page
The administration page that displays when a user logs on using his or her administrator user ID and password. The administration page displays links to individual administrator pages (eCyborg Interactive Workforce, Human Resources Administration, Benefits Administration, and Payroll Administration).

Administrative User ID
User ID created by an administrator with the role of eCyborg Interactive Workforce administrator. This ID

differs from the employee user ID generated for the administrator.

Aggregate tax method

Method of calculating taxes in which year-to-date income is used to project annual wages (using prorating), on which taxes are calculated. With this method, the amount of tax withheld can vary from pay period to pay period. This method is useful in preventing a salesperson from being over withheld as the result of fluctuations in commission over various pay periods. It is activated on the payroll solution by selecting aggregate/cumula tax (9) from the Withholding Method (PR09) option list on the Employee Tax Record Maintenance form. It is also referred to as cumulative tax calculation method.

Annualization

Process of calculating the annual amount of pay based on the number of pay periods and pay period amounts. Calculated by multiplying the number of pay periods in the year by the current taxable wages in the pay period.

Annualization factor

The factor that is used to multiply current pay period wages to determine annual wages. For example, a monthly pay frequency has an annualization factor of 12. The Payroll Solution typically calculates income taxes on the basis of annual wages. The annualization factor is entered by selecting an option from the Annualization (PP33) option list on the Company Pay Frequencies form for each pay frequency.

Annuitant

Someone entitled to receive or currently receiving payments from an annuity.

Annuity

A contract providing an income for a specific period of time.

Applicant

A person who is applying for a job or position in your organization. Internal applicants come from within your organization while external applicants come from outside of your organization.

Appraisal rating

A method of ranking the performance of an employee during a given period using options ranging from 1-outstanding to 5-unsatisfactory.

ASCII

American **S**tandard **C**ode for **I**nformation **I**nterchange. The basis of character sets used in almost all present-day computers; US-ASCII uses only seven bits to convey some control codes, space, numbers, most basic punctuation, and unaccented letters a-z and A-Z.

Ask Me wizard

A natural language, full-text search facility within the online help. This allows users to type in a question, the wizard interprets the question, and displays related topics.

As-of reporting

Ability to report on data for a specified date or date range.

Audit record

A snapshot of information entered on a form. Audit records are stored on the employee database and are displayed on audit reports in an is/was reporting format. Adjustments and time entries are stored as audit records and are extracted for a payroll run in which they update the employee's record.

Audit report

A report that is available after the running of a program; it lists created records as well as error messages for records that could not be created.

Audit trail

A report of changes made to your employee database, such as the Payroll Audit Trail (0101) report.

Authorized absence

Absences that are generally considered as paid time away from regularly scheduled work.

Automatic plan

A plan that has been defined with a default option and default pre- or posttax indicator (also known as core/default plan).

Average deferral percentage
Percentage used in nondiscrimination and compliance testing mandated by US law. The calculation is defined as the contribution divided by the compensation.

Average rating
A rating used for performance appraisal systems with categories weighted by relative importance, where the average score reflects the weighted scores.

Back
Takes the user back to the previous page.

Badge
Time and Attendance Administration can be set up to use two different types of badge readers. The type of badge your organization uses, is determined by your third party badge reader software. The two types of badges are magnetic badges and bar code badges.

Badge error
Occurs when a badge is used to create a clock transaction (ring) and an employee has not been assigned to the badge.

Badge number
Up to ten-character ID stored on employee badges and clock transactions (rings) that tie clock transactions (rings) to an employee on the ***Employee Database*** (on page 193).

Batch
A group of transactions submitted to the batch payroll processing system. Also, a collection of time entries that corresponds to an employee group, such as department.

Batch control record
Precedes all transactions separated by group; used to identify the company to which the transactions in that group apply. By entering anticipated totals for dollars and hours on the batch control record, you may verify your totals against those accumulated by the system.

Batch layout facility
A program that produces a segment layout for loading forms via batch. This was formerly known as BATCHL.

Batch number
An alphanumeric field on the batch control record containing a user-defined value used to identify a unique group of time entries or transactions.

Batch processing
A processing method that runs in the background and requires limited intervention.

Benchmark job
A standard or point of reference for determining total job points.

Beneficiary
A person named by the participant in an insurance or pension plan to receive any benefit provided by the plan if the participant dies.

Benefits control number
A four-position, alphanumeric identifier that specifies which tables are accessed for an organization.

Benefits statement
Report that indicates the coverage and cost of each benefits plan in which an employee participates.

Big option list
A large option list that includes a search facility. This was formerly known as a big codeset.

Bridge loan
A loan made to assist a relocated employee in purchasing a new residence before the sale of their old residence is complete.

Browser
Software application used to locate and display web pages. Modern browsers give users access to graphics, text, and multimedia information, including sound and video.

Budget plan year
A twelve-month period over which a salary budget is effective.

Budget scenario
The result of creating one or more salary plans in order to see the effect of different increase policies on the budget.

Budget setting
The process of analyzing and selecting an organization's salary budget for the coming plan year.

Cafeteria plan
A specific type of flexible benefit plan that allows employees to select their benefits from a number of benefit plans. This term may be used interchangeably with flexible benefits plan.

Calculation option list
An option list that contains calculation formula. This was formerly known as a calculation codeset.

Candidate
A person who is applying for a job or position in your organization and is under consideration.

Career planning
Providing career incentives such as advancement and additional education and training for individual employees in order to meet projected organizational needs.

Carrier record
A carrier record supplies information from one application area to another application.

Case-sensitive
A program that distinguishes between uppercase (capital) and lowercase (small) letters. A case-sensitive program that expects you to enter all commands in uppercase will not respond correctly if you enter one or more characters in lowercase.

Catalog
A file (with the extension of .cat) that contains all the information necessary for Impromptu to access and retrieve information from a relational database. The catalog provides a business view of the data, as well as information about what database to access, where the database is stored, and how the tables in the catalog are joined in the datamart.

Category code
General term used to refer to the option selected from category (PP01 and PP02) option lists on the company earnings and company deductions forms. It is used to indicate the type of earning or deduction.

CE/H
Abbreviation for considered earnings/hours.

Change control facility
A facility for updating and comparing your system control repository. This was formerly known as MAINTI/MAINTO.

Check box
A standard windows control that displays a yes/no setting, either checked (yes) or unchecked (no).

Check digit
Unique identifier that is generated by the TBLCHK program and used by the system to check the table relationship records.

Checklist
A list of tasks to be performed in sequence. The checklist displays within the navigator area. Checklists link tasks and other checklists together to perform work flow functions. Users can display a checklist by selecting a checklist icon within the tasks in the navigator.

eCyborg Interactive Workforce specific—a list of tasks/pages generally displayed in a chart with hot spots (links) for the checklist items. The user clicks the link to access the page.

Checklist item
An item appearing within the navigator when a checklist is being displayed. Checklist items include tasks, dialogs and even other checklists.

Checklist item status
Defines the status of a checklist item. These can be:

- Available to perform
- Required
- Not available
- Already completed

Checklist margin
The area of the navigator that displays the checklist item status when a checklist is being displayed.

Checkmark
If in the done column of a eCyborg Interactive Workforce checklist, indicates that an item on a

checklist is complete. Can also indicate OK, finished, submit, and so forth.

Class
A class is an occurrence of a course that is specific to a location and a date, that is being administered using Training Administration. For example, 'eCyborg: Using the Web Client′ on Thursday, December 21, in Chicago is a class of the course 'eCyborg: Using the Web Client'.

Class evaluation results
These are the results as entered on the evaluation forms filled out by the class participants upon completion of the class. These results are recorded on the class evaluation results form.

Client data file
File containing information replicated from the System Control Repository. Used by client workstations to improve response time, since editing can be performed locally. May be located on each client workstation or may be located on a server and be shared by multiple client workstations on the network. Formerly known as the Client Control File.

Clock in and out
Also referred to as swipe/swiping the clock. When an employee uses their badge to record an activity time, they must pass their badge through the badge reader. This action can be referred to as clocking in and out.

Clock transaction
Record containing the information needed to create time entries for payroll processing. Clock transaction (ring) information includes date, time, and badge number. A clock transaction (ring) is created when a badge is swiped through a clock.

Clock transaction warning
Occurs when a clock transaction (ring) time falls outside of an employee's schedule warning times.

Closing costs
The costs associated with the purchase of a new house.

CLP
Abbreviation for certificates, licenses, and permits.

Codeset
A list of valid code values and associated descriptions from which you may select an appropriate entry. This is now known as an option list.

Coefficient
Customer-defined value used in the formula to calculate a new salary grade midpoint value.

Combined register (2222) report
A report that provides a detailed printout of all earnings, hours, taxes, and deductions for all the payments and adjustments made on a payroll run. It is Report Generator 2222.

Command button
A standard windows control that initiates a command of sets an option (previously known as push button).

Common tax organization
A method of setting up taxation in an organization in which all necessary tax specification records are contained in a single organization. The common tax organization often handles tax specification records more efficiently, since it avoids duplication of the federal tax records and of any state or local records used by multiple companies.

Communication event
A letter or email that can be triggered automatically or manually within the system. Communication events are set up by the system administrator and usually include data from a form or record.

Compa ratio
The ratio of a given salary compared with the midpoint of the salary range. The formula is the salary divided by the midpoint.

Competency
A requisite capacity to perform a single or set of skills or activities.

Complement limit
A 'complement limit' is the maximum number of complement units that can be assigned to a position at any one time.

Complement position
A 'complement position' is a position that is included in complement control.

Complement unit
A 'complement unit' is the type of unit used to measure the value of a position, for example, headcount, fte or hours.

Compliance
Conformity in fulfilling legal requirements.

Component
The first level of functional organization on the navigator or menu, such as employee resourcing or employee development.

Component icon
An icon that denotes the current component. There are a number of components within the system. Each component appears as an icon on the navigator.

Component plan
Any plan included under the flex master plan or grouped together under a group master.

Condition
Predefined criteria that can be added to a report's filter.

Considered earnings
An employee's paid earnings that are to be accumulated, based on plan rules, for use in determining credited service or calculations of final benefits amounts.

Considered earnings/hours (CE/H) accumulators
Used only in benefits plans to accumulate the earnings and hours an employee has acquired toward eligibility for a deferred plan. Accumulators may be retained on a monthly, quarterly, or annual basis.

Considered hours paid
Actual number of hours for which an employee was paid and that are to be accumulated based on plan rules.

Considered hours worked
Actual number of hours an employee worked. These hours are to be accumulated based on plan rules for use in determining credited service for a plan participant (or for a non-participant if eligibility has been met).

Consolidated reporting
Option that enables packaged reports to be processed for all organizations (consolidated).

Customer-defined value used in the formula to calculate a new salary grade midpoint value.

Context-sensitive help
Information about an object and its current condition. It answers the question 'what is this?'

Contribution type
The type of contribution being made to a benefits plan. The system allows for the deduction and accumulation of up to five different contributions per plan: basic employee pretax, basic employee posttax, supplemental employee pretax, supplemental post-tax, and organization.

Control 1-2
A company or group of employees (now known as an organization).

Control levels
A hierarchy of values used to determine the breakdown of an organization for reporting purposes. The values are user-defined.

Control number
An alphanumeric designation assigned to a table to define the table records that will be used for each organization.

Conversion
A method for transferring data from either a manual or automated system into the system.

Co-ordinator
A coordinator is an instructional institution, organization or person who administers training courses.

Core plan
One of the plans that make up the minimum benefits in which all eligible employees are required to enroll—for example, medical and life. Employees who fail to return enrollment forms with their benefit choices may be automatically enrolled in the core plans (also known as default plans).

Cost categories
Cost categories are classifications or divisions used to separate costs for training into broad groupings, for example, equipment or operating costs.

Cost types
Cost types are used to further define training costs. For example, the category of equipment could be further broken down into the cost type of overhead projector and monitor rental.

Costing
Projecting the future cost of a benefits plan contribution for budget purposes.

Course
A course is a separate unit of instruction in a subject being administered using the training administration solution. For example, 'eCyborg: Using the Web Client′ is a course. This may be applied to a training course provided internally or externally.

Course directory
A course directory is a list of all available courses.

CPI
Characters **p**er **i**nch

Credited service
The number of years of employment for which an employee is given credit for use in determining final benefits amounts.

Crew
A group of employees who rotate from one schedule assignment (shift) to another, following a rotation pattern.

Crew code
A unique, one-character, alphanumeric identifier of a crew.

Cross-reference keys
Provide direct query access to data within the system database.

CSL
Abbreviation for ***Cyborg Scripting Language*** (on page 191).

Cumulative data
Also called 'to-date data'. includes payroll earning, deduction, net pay, taxable wage, and tax to-date figures for employees.

Cursor
A special symbol, usually a solid rectangle or a blinking underline character, that signifies where the next character will be displayed on the screen. To type in different areas of the screen, you need to move the cursor. You can use the arrow keys or a mouse to move the cursor.

Customer-defined
Values that depend on an organization-specific definition--for example, option list.

CYB88X
An English Language root program used to set the production version switch to on or off, in addition to other automatic settings.

Cyborg Scripting Language
Cyborg's fourth-generation programming language, previously called English Language.

Data extract
Method for extracting information from The Solution Series for the purpose of subsequently loading it into eCyborg Interactive Workforce databases.

Data load
The process of moving data from one system or media to another. It encompasses data mapping, data extraction and conversion, and the actual loading of the data. Also the method of loading data extracted from The Solution Series into eCyborg Interactive Workforce databases using programming scripts.

Data mapping
The process of identifying, comparing, and matching data (field to field) to be converted from one system or media to another.

Database
A collection of information organized so that a computer program can quickly search for and select specific pieces of data. Think of a database as an electronic filing system.

Datamart
Relational tables with a defined structure that have been designed to automatically accept full datamart extract data seamlessly.

Deduct credits by plan
A method of distributing flexible benefit credits. The total monetary value for credits is prorated based on the employee's pay frequency. Credits are given to employees as earnings added to their pay; the cost of individual employee plans are collected through payroll deductions and listed on the employee's payment stub.

Deduct credits by plan method
A method of distributing flexible benefit credits. Credits are given to employees as earnings added to their pay; the individual employee plan costs are then collected through payroll deductions.

Deduction
An amount subtracted from available net pay. Deductions can be involuntary (child support or maintenance) or voluntary (pension plans).

Deduction cycle
A predetermined schedule for taking voluntary deductions, based on the defined frequency.

De-enrollment
The process of shutting off plan benefits for an employee for reasons other than a separation activity.

Deferred compensation
Any benefit that is not immediately payable to an employee, but is instead deferred to a later date. This term refers to retirement vehicles, including all defined benefit, defined contribution, stock, and thrift/savings plan.

Deferred plan
Any benefits plan in which benefits are not immediately payable to an employee, but are deferred to some later date. This term refers to retirement vehicles, including all defined benefit, defined contribution, stock, and thrift/savings plans.

Delimiter
A character that tells the system where an item of data ends and another starts.

Dependent
An individual who relies or depends on another for his or her support.

Dependent number
A unique number in the eCyborg Interactive Workforce database that identifies an employee's spouse and his or her other dependents.

Detail page
A page in eCyborg Interactive Workforce that displays detailed information. Summary pages contain links to the detail for each record.

Dialog box
A secondary window that appears on the screen to present information or request input. Dialog boxes are generally temporary—they disappear after you enter the requested information.

Disability insurance tax
A tax required by some us states to be funded by employee-paid contributions to pay all or part of the cost of disability insurance coverage. On the Payroll Solution, us state disability insurance tax records are established as Type 4 taxes.

Disciplinary action
Action taken against an employee for violation of an organization policy or procedure.

Discretionary increase
A salary increase amount or percentage determined by a manager according to the guidelines established by the organization.

Display
Make data or images display on a computer monitor.

Display box
An area on a form in which data is displayed (formally known as an inquiry field).

Disposable income
For garnishment purposes in the us, an employee's earnings minus deductions required by state or federal law.

Distributed location
A customer location where data changes are replicated and may be distributed. A DL is identified to the system by a unique 5-position alphanumeric node ID.

Distribution
The process of passing data from a source DL to one or more target DLs.

Distribution rules
A set of parameters that determine how data will be distributed from one DL to another. These are defined at each DL by the owner using the distribution rules screens. Distribution rules are stored in tables that are not replicated (thus, they cannot be distributed).

DL
Abbreviation for ***distributed location*** (on page 192).

Double-click
Click a mouse button twice in rapid succession.

Drop-down list
A drop-down list is a view of the acceptable entry options available for a text box.

Drop-down list box
A standard windows control that displays a current setting but can be opened to display a list of choices. The user selects a choice by double clicking on the choice. The user can type into the field, and the system moves the list of choices to the last letter typed.

Dynamic SQL
Statements created by a program that must be interpreted and converted to executable sql statements at run time.

Earned income credit
A refundable amount that reduces the tax owed by certain low-income individuals in the us who meet adjusted gross income levels.

Earning
Money paid in return for work performed or services rendered. In Payroll Administration, earnings are separated by earning numbers into various categories such as regular pay, overtime pay, shift pay, bonuses, and so forth.

Earnings category
Used to categorize similar earnings. For example, all the overtime earnings can be grouped into category 01, all the shift differentials/premiums into category 06, and so forth.

EBCDIC
Extended **B**inary **C**oded **D**ecimal **I**nterchange **C**ode; binary code for alphabetic and numeric characters developed by IBM for its computers.

eCyborg Interactive Workforce Home
Button on every page that returns the user to the eCyborg Interactive Workforce Home Page.

eCyborg Interactive Workforce Home page
Home page that displays each time employees log on to eCyborg Interactive Workforce after completing the new user tasks on the New User Home page.

Effective date
Date on which an event takes place, for example, an enrollment or benefits plan change.

EIC
Abbrevation for ***earned income credit*** (on page 193).

EL
Abbreviation for English Language, now called CSL (Cyborg Scripting Language).

Electronic Performance Support system
Online tools that help users perform their job quickly and efficiently. EPSS can include online help, computer-based training (CBT), electronic manuals, wizards, and so on.

Email
Literally 'electronic mail'. This is a message that is sent to one or more people within or outside of your organization by an automated email software package.

Employee cancellation
An employee cancellation occurs when an employee is canceled from attending a training class or training program.

Employee Database
The file that contains organization and employee records. This is File02. It was formerly known as the Master File.

Employee Database record
The complete record for an employee. It may be composed of multiple physical records.

English Language
Former name of Cyborg's fourth-generation programming language, now called Cyborg Scripting Language.

Enrollment form
A customer-defined form used by employees to record their benefits elections and any associated dependent and/or beneficiary information.

Entitlement accrual
An accumulation of hours for an employee benefit, such as sick leave or vacation time, commonly known as an accrual.

Entity
Each Organization Unit, Job, Position, and Incumbent is an entity. Together they are entities.

Entry field
An area on a screen or browser page where the user can input information.

Entry form
An entry form is a form used to enter data.

Environment
The host platform and workstations where your Cyborg system resides, and any communication protocols. Also, a work space dedicated to a specific processing type. For example: development, test, and production.

EPSS
Abbreviation for ***Electronic Performance Support system*** (on page 193).

Event
The combination of a trigger (changes made to system data) and an action (the creation of an email or letter). Events always consist of these two component halves.

Excused absence
Absences from regularly scheduled work that can be considered as either paid or unpaid time off.

Extract file
A data file generated to be used by another system or application.

Federal Insurance Contributions Act
The United States Federal Insurance Contributions Act imposes two taxes on both employers and employees. Tax is withheld from an employee's wages to finance the Old-Age, Survivor's, and Disability Insurance (OASDI) social security program and the Hospital Insurance (HI) medicare program. Employers are then required to match the amounts withheld from employees. On the Payroll Solution, employee information for FICA-OASDI social security tax is entered on tax record 101 and FICA-HI Medicare tax on tax record 103.

FICA
Abbreviation for Federal Insurance Contributions Act.

Field
A data item on the database. This is usually displayed on a form as a text box.

eCyborg Interactive Workforce specific—A space allocated for a particular item of information. A tax form, for example, contains a number of fields: one for your name, one for your Social Security number, one for your income, and so on. Every field has a name (also called a field label).

Filter
Device used by report to select certain rows of information from the database, thus limiting the amount of data from the database to be viewed in the report.

Finished
Users click Finished when they have completed all information on a checklist or other *ESS* page.

Flat rate tax
A US local tax that is calculated as a standard percentage rate and that is calculated in the same way for all employees (that is, factors such as marital status do not enter into the calculation). For many such local taxes, Cyborg does not provide tax specification information on the Tax Authority File. Instead, you need to enter a Tax Specification Record for the tax on a Tax Specification Information form, indicating the tax rate in the Flat Rate text box.

Flex credits
Units granted to an employee in order to purchase benefits under a Flexible Benefits Program.

Flex Master Plan
Defines your Flexible Benefits Program and ties component plans together as a group. Employees are enrolled in the Master Plan and then select the benefit plans in which they wish to participate—for example, medical, dental, and life. Flex master plans are set up in Benefits Administration and used by eCyborg Interactive Benefits to display benefit plans to users for initial and open enrollment.

Flex plan
A benefit plan where, in addition to a core of basic benefits (if applicable), the organization/company allocates to each employee a credit for purchasing additional benefits tailored to their individual needs. Flexible benefit plans may include a flexible spending account.

Flexible Benefits Plan
A specific type of benefit plan that allows employees to select their benefits from a number of benefit plans. This term may be used interchangeably with cafeteria plan.

Flexible Benefits Program
A benefits program in which an organization may allocate to each employee a pool of credits or a monetary amount that is to be used to purchase benefits tailored to individual needs.

Flexible Spending Arrangement
A benefits welfare plan set up as an account in an employee's name that is used to reimburse the employee for certain personal expenses. In the United States, these accounts are provided by employers as a way for employees to pre-fund dependent care, legal services, or medical expenses with pretax currency.

Folder
Logical organization device for the content of a Cognos catalog.

Form
A window of information that appears within The Solution Series, including text boxes and other controls. This was formerly known as a screen.

Form area
An area of the window that contains a form.

Form Builder
A tool provided by Cyborg Systems for use with The Solution Series for designing forms.

Formal education
Education that is obtained from a college or university.

Forward
Displays the next page.

FSA
Abbreviation for Flexible Spending Arrangement.

FTE
Abbreviation for Full Time Equivalent.

FTP
File **T**ransfer **P**rotocol. A means of allowing a user on one computer to transfer files to and from another computer over a network

Full Time Equivalent
The ratio of total working time to the time that represents full time employment for a single employee. For example, an FTE of 0.5 means working half of the time that represents full time employment.

Funeral days
Absences from regularly scheduled work due to a funeral, which at the discretion of the organization, can be considered as authorized or unauthorized, paid or unpaid time off.

Gap analysis
Comparison of a current state of being with a desired state of being. For example, you could perform a skill or competency gap analysis on individual employees or on the workforce as a whole, comparing the existing state of skills and competencies with the required state or level of skills and competencies.

Garnishment
A legal procedure authorizing a deduction from an employee's earnings to satisfy a legal requirement.

General ledger interface
A file that provides a balanced payroll journal for the period. This file contains journal entries for labor expenses, withheld deductions, income, disability, UI, and other withheld taxes, net pay, and company-paid taxes. The interface may also be produced on paper.

Go to details
Displays a new page with detailed information. Used on summary pages.

Graphical User Interface
The Solution Series provides integrated human resource and payroll functionality via the Microsoft Windows Graphical User Interface. These are the elements that display on your screen.

Grievance
A formal complaint made by an employee against the organization usually because of an unsatisfactory working condition or other work-related dispute.

Gross wages
The total of all earnings paid to an employee.

It is stored in the Total Pay (field 119 of the US Tax Authority File) field of the employee's US FICA tax record 101 (FICA-OASDI). This figure appears on the Combined Register (2222) report as Total Pay. It does not appear on US W-2 forms.

Group box
A standard Windows control that groups a set of controls.

Group plan
Defines any number of benefit plans tied together as a group. Group plans are used to define common eligibility and to cluster plans for reporting purposes.

GUI
Abbreviation for Graphical User Interface.

Handicap
Having a physical or mental disability that substantially limits activities especially in relation to employment or education.

Health and safety profile
Data on the employee record that includes information such as the employee's blood type, language, physician, emergency contacts, and any disabilities.

HED
Acronym for Hours, Earnings, and Deductions. Each earning or deduction must be established in The Solution Series with a unique identifying three-digit code. HEDs are used to record pay, hours worked, and deduction amounts and arrears for each employee.

Help
Hot spot on an eCyborg Interactive Workforce page that displays step-by-step directions for completing the page.

History record
Part of an employee's payment history; a snapshot of a check paid to an employee or an adjustment made to an HED or tax.

Holiday days
The time off that all employees are entitled to based on the decision of the organization or government regulation.

Home page
The main page of a Web site that generally serves as an index or table of contents to other documents stored as pages on the site.

HTML
Abbreviation for **HyperText Markup Language,** the authoring language used to create documents on the World Wide Web. HTML defines the structure and layout of a Web document by using a variety of tags and attributes.

Import facility
A tool delivered with The Solution Series that moves data from an external source to any organization or employee form.

Import record
A line in a spreadsheet or delimited file that contains employee or company data.

Inactive plan
A benefits plan that no longer allows employee enrollment.

Inactive tax record
An employee tax record that is no longer in effect for a given employee. Neither wages nor taxes are accumulated for the particular tax record. However, any wages and/or taxes already accumulated remain until clearing is performed. Such clearing is usually performed in preparing the Employee Database for a new year. The inactive records can be deleted at this

time. The process of making a tax inactive is called deactivating.

Incumbent
An incumbent is an employee linked with a specific position. The linking of an employee with a Position is an incumbency. An employee may be linked to more than one position; in other words, an employee with multiple incumbencies. A position to which more than one employee is linked has multiple incumbents.

Information-level security
These records grant access to employee and table data via specific password records.

Initial Administrator
Only user whose user ID and password are created during installation. The initial administrator always has authority to all administrative functions: eCyborg Interactive Workforce, Human Resources Administration, Benefits Administration, and Payroll Administration, and can assign administrative roles to others by creating administrative user IDs and passwords.

Initial passwords
Password generated by eCyborg Interactive Workforce for each user ID extracted from The Solution Series. Users must create a user-defined password when they log on to eCyborg Interactive Workforce for the first time.

InitialAdmin
See Initial Administrator.

Inquiry form
A inquiry form is a form used to view data already entered.

Instructional text
Any paragraph(s) on the page that explain the function of the page or fields to the user.

Internal candidate
An employee of your organization who is applying for another job or position in your organization.

Internet
A global network connecting millions of computers.

Intranet
A network belonging to an organization, usually a corporation accessible only by the organization's members, employees, or others with authorization and used to share information.

Investment funds
Different options or accounts available to employees for allocating their contributions, usually applicable to thrift/savings plans.

IPEDS
Integrated Postsecondary Education Data System.

Job assignment
A job associated with a particular employee.

Job code
A designation for a job assignment.

Job streams
A generic reference, Job Control Language, for your operating system's command language.

Job type
A generic category that further defines a particular job.

Jury duty
This is compulsory service on court appointed juries. Employers are required by law to excuse jury duty related absences. They are not, however, required by law to pay the employee during this time away from the job.

Label
Text that describes the information the user enters into the field.

Labor record
A record containing the hours, amounts, associated charge-to control levels, and function assigned on the employee's Payroll Home Location/Pay Allocations form.

Leave of absence
Occurs when an employee leaves the organization for a period of time, usually temporary, for personal reasons such as medical leave.

Log off
Logs the user off the system. When referring to the Log Off button, use initial caps.

Logical Employee Model
A collection of default employee information that is used to create a model. Logical Employee Model templates are used when hiring new employees to save time and ensure that critical information is established consistently and correctly. These were formally known as LMODELs.

LPI
Lines **p**er **i**nch

Mailing address
An address, other than your legal residence address, to which you have your mail sent.

Maintenance payroll run
A maintenance payroll run automatically updates organization and employee records, but it does not process time entries or generate payments, pay slips, or deposit advices. It is also used to create payment history records.

Major activity
Event that causes a change in an employee's employment status, such as a new hire, termination, or rehire.

Mandatory field
A field that requires the user to enter information before the user can exit the screen or page.

Map file
Stores the predefined relationships between an import file and a form.

Mass time entry creation
Creating time entries for a group of employees through one program execution, such as for a paid holiday.

Master File (0202) report
A Cyborg report that produces a formatted display of the data in an employee's current batch Employee Database record. This includes the wages and taxes accumulated for the employee, covering current, month-to-date, quarter-to-date, and year-to-date information for individual tax codes. It is report generator 0202.

Matrix ID
Unique identifier for each pay-for-performance matrix.

Menu
A list of choices; the choices are generally links that take the user to another screen or page.

Menu bar item
A menu that appears on the menu bar.

Message area
An area of the window that contains messages or selection lists relevant to the current form. The Message Area can be turned on or off.

Method code
One of many specific routines (usually delivered by Cyborg and identified by a two-character code) used to calculate earnings and deductions.

Midpoint
The middle of the span of currency from the minimum to the maximum of the employee salary grade.

Minimart
Relational tables you create so you can insert data from your Subset data extractions.

Monetary perquisites
A privilege or profit that an employee is entitled to that is incidental to regular wages or salary.

Moving expenses
The expenses incurred by an employee due to moving from one location to another for employment purposes.

Multiple master
A file compression technique that duplicates the current employee Permanent Master Record as many times as there are payments to that employee during one pay period. These multiple masters are detail records reflecting the amounts for the payment being made (current), and the adjusted MTD, QTD, and YTD totals. The system uses multiple master records to create history records showing the current payment figures only.

Navigation bar
In eCyborg Interactive Workforce the Navigation bar shows the name of the page you are using, for example, 'Mailing Address'. The top line of the Navigation bar

shows the path you took from the Home page to reach the present page. Links on the Navigation bar let you return to the home page or log off the system.

Navigator
Left pane of the work area which forms the main method of moving through the forms. From the Navigator users select the component, process, and task in which they are interested.

Net credit method
A method allocating flex credits. An employee's cost of benefits is calculated as either a net cash earning or a net deduction from the employee's pay. The net amount is the difference, either plus or minus, between the credits allocated to the employee and the cost of his or her flex benefits choices.

New hire
Process of hiring a new employee for your organization.

New user
A user of eCyborg Interactive Workforce who has not yet completed reviewing and updating their personal information on the New User Home page.

New User Home page
Home page that displays for new users of eCyborg Interactive Workforce until they complete reviewing and updating their personal information.

Node
A Distributed Location.

Node ID
A unique 5-position identifier for a node. The naming convention is defined by the user.

Number registered
This is the number of employees registered for a training class. It is updated and displayed on the Class Schedule form.

Object
Each System Control Repository record type is assigned an object code. A single record type can have several object codes assigned to allow limited display.

Object key
A field that allows you to specify the System Control Repository record group you want to display. The value of this field is dependent on the type of information you want to display.

Obsolete plan
A benefits plan that will no longer be used.

Off cycle
An off-cycle payroll run is an additional payroll for the period just completed. An off-cycle payroll run is commonly used to process nonstandard payments, such as bonuses. It is sometimes referred to as an additional or bonus payroll run.

Online
Turned on and connected, for example, printers are on-line when they are ready to receive data from the computer. Users are considered on-line when they are connected to a computer service through a modem. That is, they are actually on the line.

Open enrollment
A period of time during which employees can enroll in or change their benefit choices for the upcoming year, generally in October or November.

Operator ID
A four-character code that identifies the user to the system.

Option
An item in the option list for a field. This was formerly known as a codeset item.

eCyborg Interactive Benefits and Benefits Administration specific—In Benefits, the plan coverage that an employee selects, such as single or family coverage.

Option button
A standard Windows control that allows you to select from a fixed set of mutually exclusive options (previously known as radio button).

Option list
An option list is a list of options that are available within a Text box. This was formerly known as a Codeset.

eCyborg Interactive Workforce specific—Options available in The Solution Series that the eCyborg Interactive Workforce administrator loads in to eCyborg Interactive Workforce. The options are then available in the drop-down list boxes in eCyborg Interactive Workforce.

Organization

A group of employees who are employed in a common structure, governed by the same set of rules or policies, and eligible for the same earnings and deductions For example, your organization may be structured into parts that represent employee groups such as active, union, retirees, applicants, and so forth.

Formerly known as a company or Control 1-2.

Organization Level 3

A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so forth, as defined by you.

Organization Level 4

A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Organization Level 5

A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Organization Level 6

A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Organization Number

A six-character user-defined code that represents an organization; the highest level of the organizational structure in Payroll Administration.

Formerly known as a Control 1-2.

Organization Unit

An organization unit ('Org Unit') is a grouping of Positions within an organization (for example, Accounts Department).

Organization Validation table

A table that validates that an organization is valid and payments can be made.

Organization-specific tax setup

A method of implementing Tax Specification Records in which each organization involved in tax processing contains all the specification records required to process taxes for its employees, as opposed to a common tax organization.

Override file

A file used to maintain COBOL or Report Generator changes to the system.

Packaged reporting

A processing mode in which a job is scheduled to be run at a certain time.

Paid absence

Employee absence that will be paid by the organization. A time entry will be created for this absence.

Parallel run

The process of executing the same programs simultaneously on two separate systems to obtain the same or similar results.

Parameter form

A form that is displayed when certain programs are called from the Navigator or menus. The form facilitates entering parameters for the program.

Password

A secret series of characters, generally user defined, that enables you to access a computer, a software application, or a file. On multi-user systems, each user must enter his or her password before the computer will respond to commands.

In eCyborg Interactive Workforce, the password ensures that unauthorized users cannot access user-specific information.

Password aging
The period of time that elapses before a user-defined password expires and the user must change his or her password.

Pay allocation
A means of allocating, on a percentage basis, employee labor hours and amounts to multiple sets of control levels 3 through 6 and function to accurately reflect employees whose labor must be charged to more than one area within an organization.

Pay document
A pay slip or deposit advice with its associated pay stub.

Pay frequency
The interval at which a group of employees is paid. Examples are weekly and semimonthly. Also referred to as a payroll period.

Pay schedule
A predetermined schedule for a calendar year, identifying period-end and payment dates for each pay frequency.

Pay stub
A preprinted form, corresponding to a check or deposit advice that lists all earning, gross pay, taxes, deduction, and net pay information for an employee.

Pay-for-performance matrix
Chart representation of the variables that result from the combination of salary increase information, how much to give and when.

Payment history record
A record documenting the detail information for a payment or adjustment. Multiple payment history records may be generated for an employee, reflecting multiple adjustments or payments. These records include all earning, deduction, and tax information included in the payment or adjustment.

Payroll home location
The location where the employee is normally assigned to work and where labor distribution information is charged. An employee's home location comprises specific Payroll Levels and is always assigned Allocation Number 01 on the Payroll Home Location/Pay Allocations form. The Function field may also be used as part of a home location, depending on your specific requirements.

Payroll Level 3
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so forth, as defined by you.

Payroll Level 4
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Payroll Level 5
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Payroll Level 6
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Payroll period
A defined period of time for which an employer pays wages to employees.

Payroll Process Control
A series of forms used during the Payroll Process to determine the type of run (payroll run or maintenance run). Allows you to specify the pay frequencies to be paid and which reports are to be produced.

Payroll run
Updates organization and employee records, processes time entries, calculates employee pay, generates pay documents and payroll reports, including the Combined Register. It also produces a variety of special interface outputs.

PCL
Printer **C**ontrol **L**anguage

PDF
A file format that captures formatting information from a variety of desktop publishing applications, making it possible to have formatted documents appear on the screen and be printed. To view a file in PDF format, you need Adobe Acrobat Reader, a free application distributed by Adobe Systems.

Peer-group appraisal
Appraisal that uses performance evaluations completed by an individual employee's co-workers or project team members.

Pending de-enrollment segment
Plans for which an employee is enrolled, but has lost eligibility, as listed on the Pending Plan Enrollment/De-Enrollment form.

Pending eligibility segment
Plans for which an employee is eligible but not enrolled, as listed on the Pending Plan Enrollment/De-Enrollment form.

Performance appraisal
A periodic assessment and ranking of an employee's skills and accomplishments.

Performance appraisal rating
A method of ranking the performance of an employee during a given period using options ranging from

1-Outstanding to 5-Unsatisfactory.

Performance rating
A method of ranking the performance of an employee during a given period using options ranging from 1-Outstanding to 5-Unsatisfactory.

Performance-related pay
Monetary payments made to employees based on how well an employee has fulfilled job expectations.

Perquisites
Property or privileges extended to an employee.

Personal days
Authorized absences that are generally considered as paid time away from regularly scheduled work, but can be either paid or unpaid.

Phonetic keys
The keys you use to access employee data using the phonetic spelling of an employee's last name.

Pixel
The smallest rectangular area of an image on a screen.

Plan deactivation
A process that makes a plan inactive and prevents future employee enrollment.

Plan ID
A three-position, alphanumeric identifier for a plan in the system.

Plan shutdown
The process of de-enrolling an employee from all benefits plans because of a separation activity.

Plan year
The 12-month period over which a salary budget is effective.

eCyborg Interactive Workforce specific—The calendar, policy, or fiscal year in which the records of a Benefits plan are maintained.

Policy tables
Highest level tables that are used to record the generic (or master) rules for an organization or group of employees. These included your organization's rules relating to working time procedures, such as clocking in and out, docking for lateness, and overtime. Each policy consists of a Policy Master table and one or more Policy Activities table.

Pop-up menu
A menu that appears when you use the second mouse button within the system. This menu contains context sensitive commands and options that relate to the object you have clicked on.

Portable document format
See PDF.

Position
A specific role with an organization—for example, Accounts Manager.

Alternative definition: to place an object in a specified location.

Position Administration Control Number
Two-character alphanumeric value that tells Position Administration which tables to use for a specific company.

Position complement
A 'Position complement' is the value of a Position. The organization complement is the total value of all Positions included in the complement.

Position in range
The difference between a given salary and the minimum of the salary range, divided by the difference between the range's maximum and minimum, and expressed as a percentage.

Posttax
A contribution made after taxes have been withheld from earnings.

Premium
The amount of money an organization agrees to pay an insurance company for a policy or annuity, or the amount contributed by an employee to the employer to cover the employee's portion of the total premium.

Prenotification
Informing a bank or credit union that an employee will be using direct deposit with them in the future. Cyborg recommends that you fill out the Direct Deposit Information form two pay periods in advance of the first deposit date. This ensures that a prenotification record is provided to the bank or credit union in a timely manner.

Pretax
A contribution made before taxes have been withheld from earnings.

Primary account
The account set up in eCyborg Interactive Workforce to receive an employee's pay or reimbursement checks. After deductions and deposits to additional (secondary) accounts, the remainder of pay is deposited into the primary account.

Process
A subset of a component that logically groups tasks on the Navigator or menu. For example, the process 'Maintain Employee Details' contains tasks such as 'Basic Employee Information' and 'Personal Information'.

Alternate definition: An action that brings about a result.

Process bar
The graphical representation of a process on the navigator. Each process bar is within a Component.

Program
A program is a series of classes being administered using Training Administration. For example, 'The Cyborg Training Schedule for January-June 1996' may be a program consisting of eight different classes.

Alternative definition: a form or other program within the system, accessed directly from the Command dialog box. For example, form EF-SCR is a program.

Protected amount
The amount of disposable income protected from garnishment in the US This amount may vary from state to state.

Prototype HED
An HED defined on a benefits form for use in recording employee/organization contributions when an employee is enrolled in a benefits plan. This allows the setup and maintenance of payroll deductions using Benefits Administration.

Provider
A provider is an instructional institution, organization, or person who is available to teach training courses.

Push button
A button on the interface which appears depressed when clicked on (now known as command button).

Quartile
Points that represent the division of a salary grade range into four equal parts.

Query alternate keys
The keys you use to access the employee master record in an order other than by primary key.

Query primary keys
The keys you use to direct your QUERY program to a record type.

Quick Hire
The process of hiring an employee by entering one two-panel form with the required data elements rather than entering a series of forms.

Radio button
A button on a form that selects an option, the radio buttons that make a field are mutually exclusive (now known as an option button).

Recall
Return a laid-off employee to active status, usually with no affect to benefits.

Reciprocal taxation
Reciprocal tax withholding refers to agreements made between US states and (or) localities regarding income tax calculation and reporting for compensation paid to an employee who lives in one state or locality and works in another.

Record
A complete set of fields, such as the fields that make up a tax form or a name and address record.

Alternate definition: To set down for preservation in writing or other permanent form.

Recruitment
Process of finding and hiring new employees who meet the needs of your organization.

Recycle File
P05IN; A file that contains employee data and pay document information required for payment reconciliation. It also contains time entries to be processed and paid at a later date. This file is used to pass data to the next payroll or maintenance run.

Registration
Registration is the act of enrolling an employee in a class.

Registration number
A three-digit registration number is assigned to employees for tracking purposes when they register for a training class. This enables the order in which the employees registered to be viewed.

Rehire
The process of hiring a former employee of your organization. Typically, a break in service is incurred and benefits must start over (usually requiring a new adjusted seniority date if used in benefits tracking).

Reimbursement account
The account into which employee's travel and other expense type reimbursement checks are directly deposited.

Reinstatement
The process of returning a former employee to active status within a certain time period (such as 90 days), thus qualifying the employee to have certain benefits restored to the original hire date.

Reject time
The point at which an error condition will occur. An error condition must be manually corrected/approved and approved before a time entry can be generated by the system.

Relocation
The process of moving an employee from one organization to another geographic location, whether the move be domestic or international. This process also applies to applicants who are being relocated as part of the hire process.

Remaining net pay
The 'bucket' of money that is left after all employee deductions and taxes have been taken from the employee's gross pay. This 'bucket' of money can then be used for multiple deposits if the enterprise sets up multiple deposit HEDs.

Replication
The automatic process of writing changes made in the Employee Database and option lists and tables in the System Control Repository to the Replication Holding File (FILE08).

Replication Application
English Language program (DSAPLY) that reads records from the Replication Packet File (FILE20) produced by the Replication Reception program (DSRECV) and updates the System Control Repository and Employee Database accordingly.

Replication Distribution
Two COBOL programs that work together to distribute and receive updates. The Replication Distribution Program (DSTRIB reads either the Replication Holding File (FILE08) or a Replication Packet File (FILE20), selects data applicable to a specific DL and writes all necessary data to a new output-only Replication Packet File (FILE21). The resulting FILE21 will be processed on the remote DL via the DSRECV Replication Reception program.

Replication Holding File
FILE08. This file contains additions, changes, and deletions to the System Control and the Employee Database. Data is distributed from and written to this file, based on the data distribution rules configured for the target DL by the source DL.

Replication Packet File
(FILE21/20). This file contains data changes and is created specifically to update a target DL. This information may include Company/Employee data, tables and option lists, and time entry and adjustment records.

Report
The term report refers to a report produced on paper.

Report Generator
A program that produces the batch payroll and the batch payroll reports.

Report Group
A series of packaged reports that are created using the Report Group Activities form and are run together.

Report Group Scheduler
This is the program that allows you to schedule reports. This was formerly known as the Report Scheduler.

Report parameters
Specific guidelines for determining the information to be processed by a given report or program.

Requisition
A formal request to fill a vacancy or vacancies.

Requisition candidate
A candidate for a vacancy represented on a requisition.

Requisition limit
A total unit value of a requisition.

Requisition unit
The value of a requisition expressed as an FTE, hours, salary or headcount.

Retirement
Occurs when an employee retires from the organization.

Return
The activity of an employee returning as an employee to active status, usually following a leave of absence.

Alternative definition: key on keyboard used to perform a carriage return, can also be known as Enter.

Review process
A method used by an organization to evaluate an employee's salary or performance in a standard, timely manner.

Roll-up reporting
Option that enables packaged reports to be processed within organizations (roll-up).

Rotation pattern
A way of describing the working pattern for a group of employees (crew) who regularly work different shifts. A crew is a group of employees who together regularly work the same schedules according to a rotation pattern.

Safety standards
Legally-mandated workplace safety standards.

Salary budget record
Defines, for each employee, the budgeted increase amount, percentage, and effective date for a specific salary plan year, and the prorated effect of this increase on the budget in terms of amounts and percentages for each employee.

Salary grade
A range of salary amounts associated with a particular job.

Salary grade range
A range of salary amounts associated with the salary grade for a particular job.

Salary plan
A set of rules or guidelines used to budget for salary increases for the coming year.

Salary plan year
A 12-month period over which a salary plan is effective.

Salary range
The span of salary amounts from the minimum to the maximum of the employee salary grade.

Salary review
A periodic evaluation of an employee's compensation.

Salary review authorization form
Hard copy format of the employee criteria necessary to review and approve proposed salary increases.

SAT file
The Solution Series form appearance table. Simple text file that reflects the form's layout.

Save Changes
Saves the page (form) the user completed. (When you click 'Save Changes', eCyborg Interactive Workforce saves the information on the page whether or not the user made changes.)

Schedule Activities table
Identifies activity types for each point in a work day where the process of clocking in and out should be dealt with. Each Schedule activity also contains time parameters that will be used to calculate whether an employee will be docked or credited time.

Schedule assignments
Also referred to as a schedule. This term refers to the details of the Schedule Master tables to which an employee is assigned. These details include the date the assignment took place, the Schedule Number and Sub-Schedule Number, and (if applicable), the crew to which the employee is assigned.

Schedule error
Occurs when a clock transaction (ring) time falls outside of an employee's schedule reject times.

Schedule Master table
Used to set up your organization's Time and attendance rules (such as HEDs and the minimum number of hours an employee must work before a meal deduction is made). A Schedule Master table is associated with a Calendar Routine, earnings Code, and Shift Premium table by entering the appropriate identifier.

Schedule number
A unique three-character alphanumeric identifier used to partially identify a schedule table.

Screen
Now known as a form.

Scroll bar
When information on a page takes up more than one screen of your monitor, the system adds scroll bars to the right side of the screen. On the scroll bar:

- Click the up arrow to move line by line to the top of the page
- Click the down arrow to move line by line to move to the bottom of the page
- Click the double arrows to move several lines up or down the page

Click and drag the bar in the scroll area to manually move up or down the page.

Search argument
The value from an employee's master record used to search benefits tables to apply plan rules to specific groups of employees.

Search type
The definition of a field from an employee's master record to use as the search argument.

Secondary account(s)
Additional account or accounts at financial institutions that employees set up in eCyborg Interactive Workforce receive a portion of their pay. A primary account must be defined before an employee can set up additional accounts.

Security Officer
The assigned employee who is responsible for the setting up and monitoring of the security your Cyborg system.

Self-adjusting taxes
Taxes for which the system automatically recalculates the tax on a cumulative year-to-date basis on each payroll run.

In the U. S. these include FICA taxes: Social Security (tax record 101) and Medicare (tax record 103). The purpose of this calculation is to avoid any differences (of pennies) in FICA tax paid versus FICA tax due at year-end due to rounding on a pay period basis. In addition, certain state disability taxes and employee-paid state unemployment insurance taxes also self-adjust.

Sequential Master File
P20IN; The batch processing version of the Employee Database. This file contains organization and employee data, tax tables, and the object code for programs.

Service interruption
A period of time during which an employee did not maintain an active working status in the organization.

Service method
A calculation option list that determines the method for calculating credited service.

Session
When users log onto a software application, they begin a session. When they log off, they end the session.

Alternate definition: The period of time during which a class is held.

Shift
An employee schedule assignment for a given day. For a rotation pattern, this is a Sub-Schedule Number.

Alternative definition: key on keyboard, typically used to describe key combinations for a shortcut key.

Shift premium
A premium (or differential) added to an employee's regular earnings, overtime earnings, or both. It is represented by a shift code or HED Number.

Shortcut menu
A menu that appears when you right-click within The Solution Series 4. This menu contains context-sensitive commands and options that relate to the object (form, Navigator, and so on) on which you have clicked.

Sick days
The time off that an employee is allowed to take due to illness as a result of an employment contract or organizational policy.

Solution View
An online utility that provides the tools for creating new forms, fields, and report programs without the direct use of Cyborg Scripting Language.

Source DL
The node that owns the data being distributed. Depending on the rules established, the same DL can alternate from source to target.

Special assessment
Extraordinary or temporary taxes, such as additional employer-paid or employee-paid contributions to state unemployment programs or to mandatory health insurance programs.

Spinbox
A control on the interface composed of a text box and increment and decrement buttons that allow you to adjust a value from a limited range of possible values.

Spreadsheet application
Software for recording ledger entries, creating worksheets, graphing data, and other accounting functions.

Standalone Time and Attendance
Customers who are using the Cyborg's Time and Attendance Administration but not the Cyborg's Payroll Administration.

Static data
Includes organization and employee information, such as name and salary.

Static SQL
Data Definition Language (DDL) and Data Manipulation Language (DML) statements embedded in application programs.

Status bar
The bar that appears at the bottom of The Solution Series window. The Status Bar displays useful information, such as your current session number, the currently displayed organization and employee, and so forth.

Sub-schedule number
A two-digit numeric text box used to further identify a schedule table.

Succession planning
Finding and developing employees for placement into identified key positions that are expected to become vacant sometime in the future.

Summary page
To help you see information at a glance, eCyborg Interactive Workforce uses summary pages. The summary page displays a short view of detailed information. For example, all your emergency contacts appear on a summary page. You delete the contact or proceed to the detail for the contact from the summary page.

Summary plan
A customer-owned description of a benefits plan.

Supplemental wages
Wages that are separate from regular earnings may be classified as supplemental wages and taxed using the default method. The default method means using a set percentage specified by the tax authority. Examples of such earnings are bonuses and commissions.

Surplus
A 'surplus' is an exceeded complement position.

System administrator
An individual responsible for maintaining a multi-user computer system, including a local-area network (LAN). Typical duties include:

- Adding and configuring new workstations
- Setting up user accounts
- Installing system-wide software
- Performing procedures to prevent the spread of viruses
- Allocating mass storage space

System Control Repository
This is the file that contains system definitions for The Solution Series, (FILE01).This was formerly known as the Control File.

System Generator
A type of Report Generator that performs system functions, such as defining data elements and system messages.

Table
Contains an organization's rules and policies and controls what actions take place at the employee level.

Alternative definition: means of displaying information in columns and rows.

Table Definition Record
Table containing data about the Position Administration table records, including the location of keys to associated tables.

Target DL
The node that receives the data being distributed. Depending on the rules established, the same DL can alternate from target to source.

Task
The lowest level of organization on the Navigator or menu, generally equivalent to a form. checklist, or dialog.

Task icon
An icon denoting a task. Task icons describe the type of task, including Forms, Checklists, Dialogs and others.

Tax authority
A government agency to which an employer and employee has statutory tax obligations. The tax authorities for which you handle taxes exist at the federal, state/province, and local levels.

Tax Authority File
A Cyborg-supplied file that contains all the tax-specific information needed to calculate taxes for tax authorities. This includes wage-bracket tables for different marital statuses and information relating to allowances and standard deductions. The sources for the contents of this file are tax specifications published by the various tax authorities.

Tax code
The three-character to seven-character Cyborg-supplied reference code that identifies a tax and that serves as the link between the Tax Specification Record and the employee tax record.

Tax Maintenance File
One of the two Cyborg-supplied tax files. A Tax Maintenance File is a file issued by Cyborg in conjunction with a Tax Update Bulletin (TUB). It

contains all the tax specifications that are being updated in the bulletin, in the form of tax specification transactions. These transactions are typically used as input to the batch maintenance run in which tax updates are applied.

Tax specification

Each tax authority publishes tax specification information that specifies how each tax must be administered. This information specifies how employers should calculate taxes and how taxes should be withheld from employees (if withholding applies). The tax specifications can be in the form of tax formulas and (or) tax tables.

Tax Specification record

A record on your Employee Database that contains the tax specifications for a tax. The record contains all the information, as obtained from the governmental authority, needed to calculate tax amounts for the tax. The record may contain more than one tax; for example, US state Tax Specification records contain information for both state income tax and state unemployment insurance. Once a Tax Specification record is activated, tax specification information from the Cyborg-supplied tax files can be loaded onto the record on your Employee Database.

Tax table

A set of information required to calculate a tax, for a specific set of employee parameters. Tax tables are stored and maintained in Tax Specification records. A table typically includes wage and bracket information and data relating to allowances, such as personal exemptions and to standard deductions. There can be several tables relating to marital and resident status in a given Tax Specification record.

Tax type

This term refers to various categories of taxes, for example, income, National Insurance, unemployment, disability, Social Security (FICA-OASDI), and Medicare (FICA-HI).

Taxability

The term refers to whether an hours, earnings, and deductions amount is to be included in taxable wages to be accumulated for a specific tax. If the hours, earnings, and deductions amount is excludable, then the amount is not included in taxable wages. If the hours, earnings, and deductions amount is taxable, then the amount is included in taxable wages. The term fully excludable or fully taxable implies that more than one type of tax is being referenced, for example, state income tax and state unemployment insurance in the US.

Taxable wage base

The taxable wage base represents the maximum amount of an employee's wages on which tax is levied and after which there is no liability. A wage base in the US typically is in effect for FICA, unemployment taxes, and disability.

Tax-related Regulatory Bulletin

A TUB contains the updates to tax specifications supplied by Cyborg, consisting of a bulletin document, a tax file that contains the updated tax specifications, and a printed listing of tax specification transactions with the updates.

TDR

Table Definition Record.

Template

A basis from which to create a custom item. For example, you can use an existing Cyborg report as a template for your custom report.

Temporary password

A set of alphanumeric characters used with a user ID to limit access to a software application. The system requires that users replace their temporary password with a user-defined password within a certain number of days.

Termination

The activity of an employee no longer being employed by the organization.

Test environment

A separate organization or system partition used only for testing.

Text box

A control on the interface in which text can be entered and edited (formerly known as a field).

Text qualifier

The character surrounding an item between delimiters. All values between the qualifier are data items and are

not scanned for a delimiter. This allows a delimiter character, such as a comma, to be a valid data item. Example:

"item 1","item 2","item 3, 4 and 5"

This string contains three data items:

Item 1

Item 2

Item 3, 4 and 5

Although the third item contains a comma, it is ignored as a delimiter because it is between the text qualifier of speech/quotation marks (").

Time entry
The form in which you enter the hours worked for an employee. This was formerly known as a Time Card.

Time entry extract file
A file of time entries external to the Time and Attendance Solution that is used to feed to payroll.

Time entry validation
The Time Entry Validation/Creation program identifies and assigns an activity, for example Clock In (1), to each clock transaction (ring) when performing the validation function. Each clock transaction must be assigned to an activity, in order for time entry hours to be calculated for an employee, for a particular shift. This program validates clock transactions (rings) and generates time entries.

Timeout
The period of time that elapses before a user's eCyborg Interactive Workforce account becomes invalid because of inactivity.

ToolTip
A standard Windows control that provides a small pop-up window that provides descriptive text, such as a label, for a control or graphic object.

Top-down appraisal
Appraisal made by a supervisor or manager of an employee's capabilities. Such an appraisal is generally based on the supervisor's or manager's day-to-day observation of an employee's work performance and will usually include an appraisal interview with the employee.

Trainer
Trainers are set up on the Provider Index Form. They are instructional institutions, organizations or persons who are available to teach a training class.

Trainer code
The trainer code is a four-character value that represents a trainer. This value resides in Option List TR38.

Training area
The training area is recorded on the Class Schedule Form. It is typically defined as the section of the organization to which the training applies, such as manufacturing.

Training class results
These are the class details and absence information recorded on the Process Class Results form. Details recorded include the objectives met when taking a training class.

Training class status
The status value is updated and displayed on the Class Schedule Form. It tracks whether the training class is canceled, full or available.

Training course code
The training course code is a six-character value that represents a training course. This value resides in Option List TR33 and is associated with a course title.

Training plan
A plan of training courses that an employee will attend in the future to achieve the necessary skills to perform a job.

Training reason
The reason for training is used to identify why a training request has been made. For example, the purpose of the training to act as a refresher, to acquire new skills, and so forth.

Training request
A training request is a request for an employee to attend a specific course or class. A formal request for training is not essential. This step could be omitted and the employee could be registered directly in the course of his or her choice.

Transfer
Process of moving an employee from one organization to another organization, such as moving an applicant from the applicant organization to the active employee organization.

Alternative definition: to move data or files from one computer to another

Trend analysis
Reporting or statistics that indicate the rate of change in costs and other elements of a benefits plan.

Trigger
A set of conditions that must occur for an email or letter communication event to start. This can involve the creation, deletion, or modification of forms or checklists within the system.

Tuition reimbursement
Remuneration made to employees for tuition expenses.

Type of training request
The type of training request indicated whether the employee was required to attend the training or whether he or she asked to attend the training.

Unauthorized absence
Absences that are generally not considered paid time away from regularly scheduled work.

Underlined text
In browser applications, text that provides a link to another screen or page.

Unemployment insurance tax
A tax required by some US states to be funded by employee-paid contributions to pay all or part of the cost of unemployment insurance coverage. On the Payroll Solution, state unemployment insurance tax records are established as Type 2 taxes.

Unpaid absence
Employee absence that will not be paid by the organization. A time entry will not be created for this absence.

Upward appraisal
Appraisal that calls for evaluations by those who work under the direction of the employee being evaluated.

URL
Acronym for uniform resource locator. A standard way of specifying the location of an object, typically a web page, on the Internet. URLs are the form of address used on the World-Wide Web. They are used in HTML documents to specify the target of a hyperlink which is often another HTML document (possibly stored on another computer).

User class
Cognos Impromptu assigns security according to configured user profiles. These security profiles are configured by your Impromptu administrator.

User code
A set of characters (up to eighteen alphanumeric characters) that, along with the password, identify the user to the system as a valid user user when they log on.

The user code is case-sensitive (upper case, lower case) and must be entered using the correct case.

User defined password
A set of alphanumeric characters created by users that allows them to view and update information in a software application.

User ID
A set of characters that identify you to the software application. The application contains a list of authorized users by user ID. When you attempt to log on, the system checks the list of authorized users to determine whether you have authority to use the application.

User profile
Used for security purposes to determine what you can and cannot do while you are using the system, and which parts of the system you can access. A user profile is created and maintained for you by a Security Officer. Each user of the system will have a user profile.

Vacancy
An open position that needs to be filled, or an unfilled complement position

Vacation days
The time off that an employee is entitled to as a result of an employment contract or due to length of service.

Validation
The process where the Time Entry Validation program identifies and assigns an activity to a clock transaction (ring) when performing the validation function.

Variant forms
Method of displaying country-specific variation of Cyborg-delivered forms.

Waive
The act of choosing not to enroll in an optional benefits plan.

Warning time
Used to set a period of time after which an employee will appear on the exception report for a particular activity. A Warning condition will allow the creation of a time entry. A Reject condition will not. This is part of the Time and Attendance Administration.

Welfare benefit plan group
First level of the logical organization of welfare benefit plans in eCyborg Interactive Workforce.

Welfare benefit plan subgroup
Second level of the logical organization of welfare benefit plans in eCyborg Interactive Workforce.

Welfare plan
Any insurance or other benefit plan that provides immediate benefits to a participant—for example, medical insurance.

What-if mode
Method for processing a report that allows viewing of information without updating of employee records.

Window
A standard Windows object that displays information. A window is a separately controllable area of the form that typically has a rectangular border.

Wizard
A form if user assistance that automates a task through a dialog with the user.

Work area
The Solution Series screen. It includes the menus, toolbars, Navigator, forms area, message area, and status bar.

Work instructions
Specific tasks to be completed during the migration of data and files from test to production.

Work restrictions
Restrictions that prevent an employee from participating in specific workplace functions.

Worker's compensation
Legislation in the US that provides compensation to employees who suffer work-related injuries.

Workforce competency
The capacity of the overall workforce to perform required functions and sets of activities.

XHTML
Extensible HyperText Markup Language, used by the help pages for eCyborg.

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Optimizing System Features

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Contents

PART 1

Introduction

In This Section

CHAPTER 1

About This Manual

Welcome

This manual has been designed to guide you through the functional administration of the administrative solutions to perform your business tasks.

Together with your installer, Customer Support Manager, and Help Desk, it is an important part of Cyborg Systems' Total Support Solution.

This manual has been designed as a reference document. It is also used in classroom training. You will find sufficient detail for self-study, before and after classroom training.

Who should use this manual?

This manual is designed to be used by new customers and customers who are upgrading from previous versions of the system. The following users will find it most useful:

- System support staff (analysts, programmers, system administrators)
  Any member of the support staff who programs customizations to the system and who will be involved in the implementation, upgrade, or maintenance of the system will find this manual's information and guidance helpful.

- Human Resource and Payroll managers
  The concepts and business tasks discussed in this manual provide the knowledge that will be required to successfully customize the functional administrative aspects of the administrative solutions and subsequently incorporate them into the daily business tasks.

Prerequisite skills

Users of this manual should possess a variety of technical skills, depending on the roles they will play. At a minimum, all users should have:

- Basic understanding of Microsoft Windows.
- Attended training or have experience using The Solution Series.

Additional documentation and training courses

The following documentation and training courses are available from Cyborg Systems to help you understand and administer the administrative solutions:

Documentation

Document	Description
Using The Solution Series: Administrative Solutions, or eCyborg: Using the Web Client (for users of Cyborg's web client)	This documentation covers the introductory concepts and tasks related to The Solution Series or eCyborg. It describes how to navigate through the software and explains the important concepts and functionality of the system.
Technical Administration	This manual provides descriptions of and detailed instructions for performing the technical tasks that support The Solution Series or eCyborg.

If you do not have a copy of these document, you can obtain one from Customer Support or from CUBBS.

Training Courses

Related Course	Description
Using The Solution Series	Provides the introductory concepts and tasks related to The Solution Series.
eCyborg: Using the Web Client	Web-based training which provides the introductory concepts and tasks relating to eCyborg.
Technical Administration	Introduces important concepts and tasks for the administrator who performs the technical tasks that support the administrative solutions.

If you wish to attend any of these courses, contact Customer Support or visit our website www.cyborg.com for details of course dates and availability.

How this manual is organized

This manual has been organized to make it as easy to use as possible. The chapters are grouped accordingly into the following parts:

	Chapters	Description
1. Introduction	1–2	Provides an introduction to this material
2. Personalizing Option Lists, Menus, and Checklists	3–5	Provides concepts and detailed instructions for customizing and maintaining option lists, menus, and checklists

3. Integrating Desktop Applications and Data	6-8	Provides concepts and detailed instructions for creating and maintaining communication events, export data files and import provides, and for using the document management facility
4. Appendices	A	Provides detailed reference information

Following are descriptions of the chapters within the parts:

Part 1: Introduction

The chapters in Part 1 describe this manual and provide an overview of Optimizing System Features:

Read this chapter		To learn about
1	About This Manual	How the manual is organized Where to find what you are looking for Who should use the manual Where to get help
2	Overview of Optimizing System Features	A high-level overview of the functional administration aspects of the system

Part 2: Personalizing Option Lists, Menus, and Checklists

The chapters in Part 2 describe three ways to personalize the system for your organization and to suit your work style:

Read this chapter		To learn about
3	Maintaining Option Lists	How to add, modify, and remove an item in an option list
4	Designing a Business Process	How to add, modify, and remove a checklist
5	Maintaining Menus	How to add, modify, and remove a menu item

Part 3: Integrating Desktop Applications and Data

The chapters in Part 3 describe various tools that can be integrated with your desktop applications:

Read this chapter		To learn about
6	Setting Up a Communication Event	How to trigger emails and print letters automatically or manually when employee data is created, updated, or deleted
7	Exporting and Importing Data	How to create export data files, design import profiles, and process imports that will update company and employee records

Read this chapter		To learn about
8	Document Management Facility	How to link documents to employee records and then browse through and launch these documents

Part 4: Appendices

The appendices in Part 4 contain practice and review answers:

Use this appendix		To learn about
A	Practice and Review Answers	Detailed answers to the practices and reviews in the instructional chapters

How to use this manual

This manual has been designed as a reference manual as well as a training manual. It has been written to facilitate self-study before and after classroom training.

Table of contents

The manual has been carefully designed for ease of use. All our manuals are written to be task oriented to help you complete your business tasks using our software.

The table of contents lists all the tasks and their respective chapters.

Glossary of Terms

A Glossary of Terms section is provided to explain terms used in the documentation.

Index

An index is provided to help you locate specific information.

This document was designed to reduce your need for an index. You should find the table of contents sufficient.

Introductory chapters

It is important that you read the introductory chapters first. Chapter 1 ensures you get the most out of the information we have provided. Chapter 2 provides a high level overview. Read it to get the big picture before reading the detailed instructional chapters.

Instructional chapters

All chapters, other than the introductory chapters, are instructional chapters. They contain detailed instructions on how to complete the business tasks. Each instructional chapter has the following distinct sections:

Key Concepts

Always read the conceptual information first. This will help you understand why you have to perform certain tasks. It will also help you make decisions about your options and help you understand the importance of performing certain tasks. Exercises to help you apply the concept to a business task are included at the end of most concepts.

Apply the Concept

To be certain that you have understood the key concepts in a chapter, complete the Apply the Concept exercises provided. The answers to these exercises can be found in the appendices.

Detailed Directions

When you are ready to perform a task, review the Detailed Directions, which provide guidance, as well as the specific steps, to complete a task.

Guided Practice

The Guided Practice within the Detailed Directions offers you an opportunity to practice a task with step-by-step instructions. It takes you through the various steps, providing detailed examples so you can gain a comfort level with the task. Guided Practice is easy to locate.

For practice, type 'ABC Solutions'.

Note: To successfully follow the Guided Practice, you must have completed all the previous Guided Practice exercises in the manual. The Guided Practice uses the test data installed with our software. For the Guided Practice exercises to work, this test data must not have been altered.

All users who complete the Guided Practice must either have their own copies of the test data or have the test data restored for them.

Extended Practice

To be certain that you have understood the tasks in a chapter, complete the Extended Practice provided. The Extended Practice gives you the opportunity to complete one or more tasks without step-by-step guidance. The answers to these exercises can be found in the appendices.

Note: To be able to complete the Extended Practice exercises in the manual, you must have completed all the previous exercises. You must also be using the test data delivered with the software. This test data must not have been altered.

Review of Questions Answered

To be certain that you have understood all of the information in a chapter, complete the review questions provided at the end of a chapter. The answers to these questions can be found in the appendices.

Conventions used in this manual

The underlying page layout and design of this manual are meant to be as intuitive as possible for you. Our intent is to make it easy to navigate through the manual and concentrate on learning and doing.

Cross-references

Wherever appropriate, we provide cross-references to help you find additional information or further discussion of a specific topic.

☞ *Refer to a cross-reference to find more detail or more discussion on a given topic.*

Notes

Whenever there is important information you should be aware of, we provide a note.

Note: *You will find tips or quick techniques covered in notes.*

How to get additional help

If you can not find the answers to your questions in this manual, contact Customer Support, who will be able to answer specific questions and give you general advice on training.

Please visit our web site ***www.Cyborg.com*** (see "Cyborg Home - http://www.Cyborg.com") for the latest schedule of available courses and course descriptions.

Suggestions and feedback

We value your feedback on our performance support materials. Please forward any comments on this manual to Customer Support.

CHAPTER 2

Overview of Optimizing System Features

In This Chapter

Introduction

This section provides you with the 'big picture' of Optimizing System Features. It describes the ways of making the system work for you by building in customizations to the interface, adding workflows, and integrating desktop functionality into your organization's daily business processes.

This section introduces you to the export and import of data and the use of wizard technology to create workflow processes and communication events. In addition, it covers option list and navigation customization.

Communication events

In addition to recording employee information in the system, your workflow process requires that some of that information be communicated to the employee or other areas of your organization. A communication event tool is provided, which can be set up to send emails and print letters automatically or manually when employee data is created, updated, or deleted in the system.

The Communication Event Manager is the controller of this functionality. It allows you to create, copy, modify, and remove communication events.

Communication event types

You may set up parameters for the automatic and manual generation of two types of communication events—email and letter:

- Email communication events use your automated email software package.
- Letter communication events use Microsoft Word 97 or any newer version. Letters can be created using its templates and mail merge features.

After it has been set up by an administrator, a communication event is system-wide and available to all system users.

Communication event triggers

Event triggers allow you to set up the parameters that will cause a communication event to occur. There are two types of communication event triggers—form and checklist:

A form trigger can be set up to occur when a user adds information to a form, changes information on a form, or deletes an existing form from the employee record.

A checklist trigger can be set up to occur when a user is working through a checklist and activates one of the following options:

- Finish Checklist after completing all the mandatory steps
- Finish Checklist without completing all the optional information
- Pause Checklist

As well as an automatic trigger, a manual trigger option allows a user to generate a communication event by using a button on the toolbar when working with a form or checklist that has no automatic trigger.

Email communication events

An email communication event provides your company with more capabilities than standard email software. You will be provided with multiple methods for specifying the email recipient(s), including the address book from your organization's email application. If Position Administration is in use, you can also specify that the recipient be the position to which the employee reports (direct or indirect).

You can set up a communication event to merge data from the system into the text, so that employee-specific information can be automatically displayed. For instance, you can

include registration and class information in an email to an employee regarding an upcoming class.

Several options during setup allow you to fine tune the email process. You may choose to activate one or more of the following options that give the user control when the email is generated:

- Display email preview
- Email can be cancelled
- Recipients can be modified
- Prompt if multiple recipients—provides the option of selecting the required recipient if a position had multiple recipients

Letter communication events

A letter communication event provides your company with the ability to automatically generate customized letters based on specific trigger parameters.

Microsoft Word template and merge features are included in the letter communication event process. All the functionality will work as described by Microsoft while creating the letter text. In addition, you will be able to insert fields from forms into the text, so that employee-specific information can be automatically displayed.

The following example could be the text of a letter that is sent to an employee who has been awarded a bonus or commission:

```
<<Date_Recorded>>
Congratulations <<Employee Name>>,

You have been awarded a <<HED_Xref>> in  the amount of $<<Amount_Awarded>>. You
will receive this amount on <<Date_Paid>>.

Sincerely,


G. Zarmin
Vice President, HR
```

Letters can be viewed and modified prior to printing. You have the option of printing letters immediately, queuing them for printing later, or being prompted when the letter is ready. Letters can be viewed and modified prior to printing, provided the user doesn't choose to print them immediately.

The system maintains one 'last printed' file. This means that after letters have been viewed or printed, they are moved to a 'last printed' list at the bottom of the queued letters. This acts as a backup in the event that letters need to be reprinted.

☞ *Refer to* **Setting Up a Communication Event** *(on page 141) for more detailed information on communication events.*

Data export and import

The ability to retrieve data from the administrative solutions, perform calculations or manipulate that information, and then import that enhanced data to update company and employee records allows your organization to reap the highest benefits from the administrative solutions. You can use the import profile wizard to design and process imports that will update company and employee records.

Exporting data

Cyborg provides several tools to help you extract and report on information about your organization, employees, benefits, and payroll:

- Reporting Administration
  Using Reporting Administration functionality is the easiest way to manipulate data. As delivered, Reporting Administration provides a means of extracting a great deal of information from the administrative solutions. By reviewing the data already defined, you may determine that the data you want to extract is already defined. Then the task of manipulating data and importing it back into the system could be as simple as creating an Impromptu report, saving its content in comma delimited format, altering the data, and using the Import feature to apply the manipulated data. If this is the case, you need to verify that a fresh extraction has been performed before creating your Impromptu report.

- Using ISQL or another tool to query a relational database implementation of the system
  If you have a relational system, you can use ISQL or another tool to run queries directly from the relational tables of the system. You can then save the query content in comma delimited format, alter the data, and use the Import feature to reload the manipulated data.

- Packaged reports
  Cyborg delivers hundreds of reports that have been developed using the Cyborg Scripting Language. You can use these reports in their delivered form or customize them to report on specific data. Once the data is extracted and formatted in delimited files, you can manipulate the data and use the Import feature to apply the manipulated data.

  You can also use Cyborg Scripting Language to create your own program that could be run offline to extract data.

- Solution View (create an extract)
  Solution View is a delivered user tool for developing forms, fields, on-request queries, extracts, and reports. The Report Writer in Solution View can be used to create an extract file from data within the system. After the data is extracted and formatted in delimited files, you can manipulate the data and use the Import feature to apply the manipulated data.

Regardless of the method used to extract the data, the report or file must be converted to a delimited file or placed in an Excel spreadsheet to create the import file. This file is the one used by the Import functionality to update company and employee information on the system.

Importing data

The import process moves data from an external source to any company or employee form. All you need is authority to access the import file.

The Import Profile Manager is the delivered tool that allows you to easily create, modify, rename, and remove an import profile, as well as start the import and view the resulting message log.

The Create or Modify options on the Import Profile Manager launch the Import Creation and Amendment wizard. This wizard guides you, step by step, through the tasks and options necessary to create or modify an import profile.

An import profile sets up the relationship between the import data and the form to which it will be imported, and is independent of the actual data.

Allowable import files

You can use a Microsoft Excel 97 (or higher version) spreadsheet to calculate and manipulate information. That data can then be applied to one or more forms in the system. You may also use any extracted application data that can be saved as a delimited file.

Target forms

You may easily import data into any form to which you have access, as defined by your user profile that has been set up by your Security Officer. If you have access to only ten forms, then only ten forms are presented when you are browsing for a target form.

Position Administration fields may be the target of import data. Position, job, and organization unit information may be imported.

The Import wizard

The Import Creation and Amendment wizard provides you with an easy method of setting parameters for importing data. Import profiles are specific to each user, but may be shared by copying them to another PC.

Eight steps take you through the creation of the import profile that is required prior to processing the import:

1. Welcome
2. Choose form
3. Choose file
4. Select delimiter
5. Header record
6. Message
7. Form and fields
8. Summary information

After import profiles are established, they can be shared by copying the local files from one PC to another. It is not possible to share import profiles across a network.

Control options for importing data

Prior to the actual posting of import records, you must specify how the import handles errors and specify automated options.

Pre-import validation

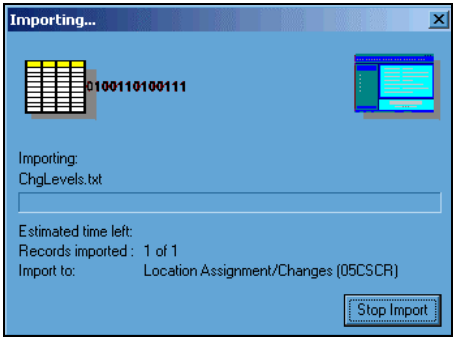
After the import options have been selected, field validation takes place. These validation checks are conducted before any records are actually imported to the system.

If all fields validate with no errors, the import process begins. If there are errors, a dialog will display all of the import records and indicate which ones are in error.

Running the import

After the import options are entered, all the validation checks are performed, and all errors are corrected in the import file, the import begins automatically.

While the import is in progress, the following dialog is displayed:



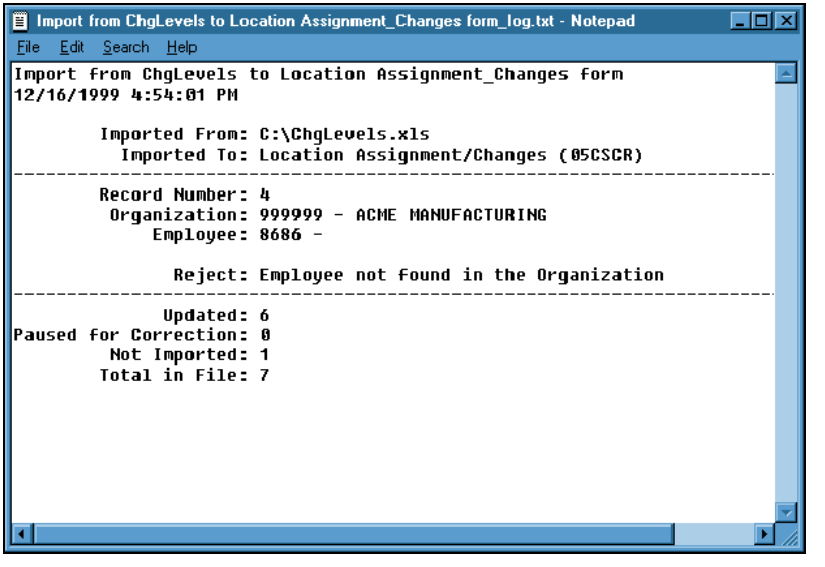
You may monitor the progress of the import run, or you may start another session of The Solution Series and perform other tasks while import is running. However, if you have chosen the option to pause the import process for errors, your attendance during the import run is required to address each error that is encountered.

If, for any reason, you need to stop the import, you can restart the import from a specific record.

Message log

If you selected the option to show a message log when the import is finished, then the log file will be automatically opened in Microsoft Notepad or other text view assigned on the PC. Alternatively, you may return to the Import Profile Manager and select View Log.

The message log contains system-level error and warning information:



The last lines of the report display a record count for the following items:

- Updated—records applied
- Paused for Correction—records you were prompted to correct
- Not Imported—uncorrected records
- Total in File—total records in the import file (excluding header record)

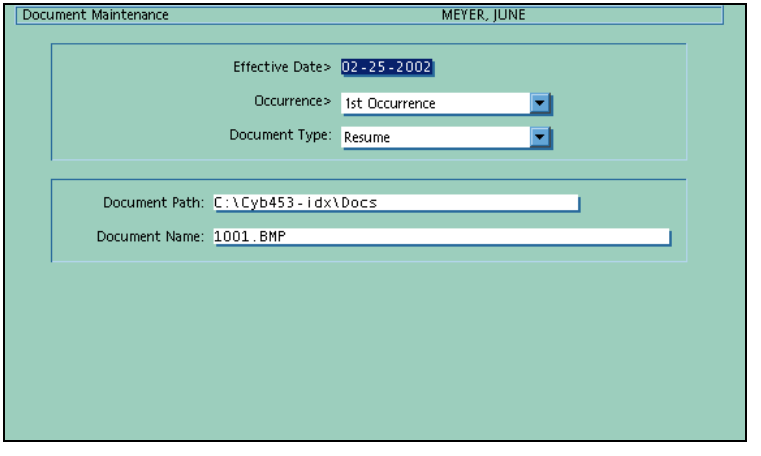
☞ *Refer to* **Exporting and Importing Data** *(on page 203) for more detailed information on the import wizard.*

Document management facility

Further desktop integration capabilities provide you with the mechanism to link employees to documents (including images) such as resumes, performance appraisals, photographs, and so forth, to employee records, and then browse through and launch these documents using a document explorer.

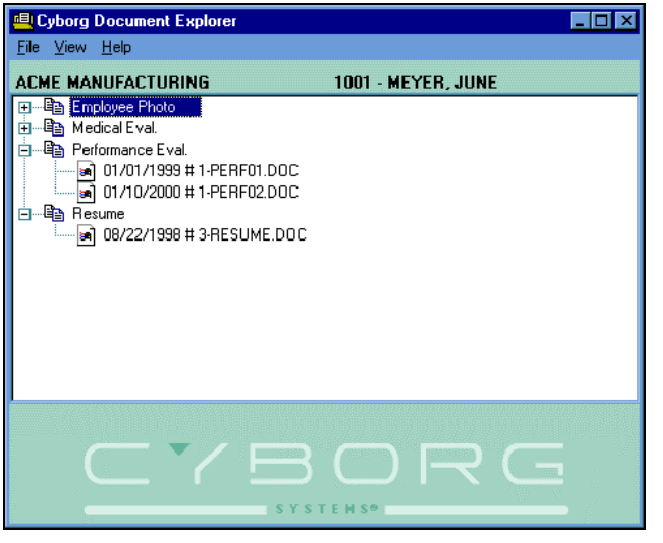
The Document Maintenance form

The Document Maintenance form (DR-SCR) is used to link documents to employees.



The Document Explorer

The Document Explorer is a tool that provides a view to the employee's document types and documents in a manner similar to that of Windows Explorer.



☞ *Refer to* **Document Management Facility** *(on page 257) for more detailed information on using the Document Explorer.*

Option list customization

An option list contains the predefined options from which you can select an entry for a list box. You must select one of the predefined options as your selection in a list box. In contrast to a text box, you can not key your own data into a list box.

For example, the Frequency option list (PP29) on the Employee Information form (EF-SCR) has the following options:

- None
- Bi Weekly
- Monthly
- Semi Monthly
- Weekly

The system is delivered with default options for each list box. These options can be modified to add or remove options to meet the requirements of your organization.

For example, you could modify the Frequency option list (PP29) to include Quarterly as a frequency type.

About the Option List Editor

The Option List Editor (CSUPDT) allows you to add a new item to an existing option list, change information about an existing item, or delete an item.

Using the Option List Editor (CSUPDT), you can modify the description and alternate language, and change the status of an item. You can not change the code itself. If you need to modify a code, you must delete the code and then add it again using the correct code.

If a universal, type 9, or organization-specific option list contains calculation or relational logic, you must use the Edit Utility (EDIT) to edit the logic or to add documentation. You must also use the Edit Utility (EDIT) to create or delete an option list.

Impact of option list maintenance

When you finish editing an option list, both the System Control Repository and the Client Data File on your workstation are updated immediately. Other users will see the changes the next time they press Enter.

☞ *Refer to* **Maintaining Option Lists** *(on page 27) for more detailed information on editing and customizing option lists.*

Navigation customization

You are given easy access to all information through the Navigator and menus. Customizing menus provides another way to personalize the system to meet the needs of your organization. Using the Menu Editor, you can edit any of the delivered application menus to show only those items you will use, change the order of items, or replace items.

Delivered menus

The delivered menu bar contains two types of menus—function menus and application menus:

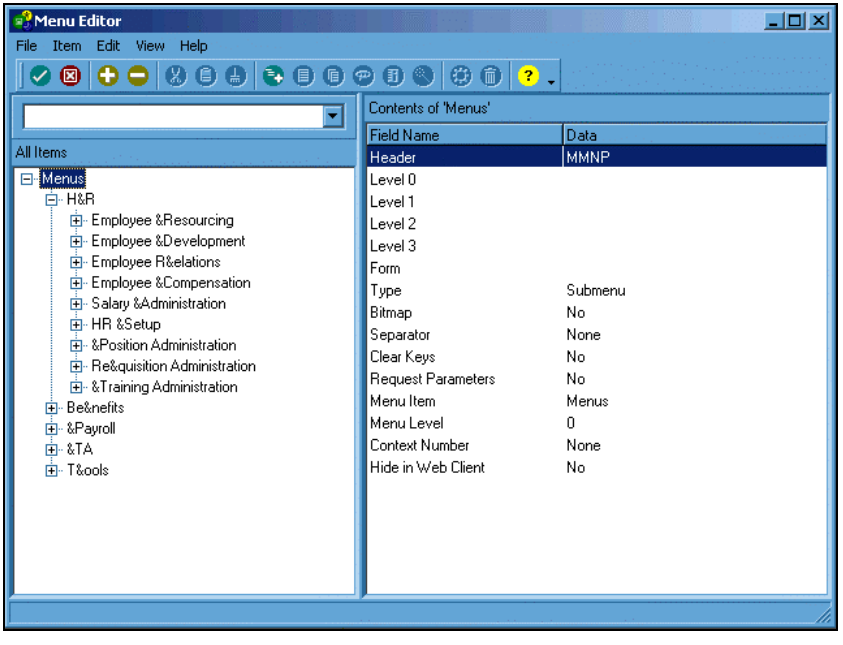
- Function menus (File, Edit, View, Bookmarks, Actions, Go, and Help)
- Application menus (HR, Benefits, Payroll, TA (Time and Attendance), and Tools)

Application menus provide access to the business components and to tools and utilities. You can edit only the application menus. You can not edit the function menus. Changes made to menus are available to all users.

Menu Editor

Using the Menu Editor, you can edit any of the delivered application menus to add an item, show only those items you will use, change the order of items, or replace items.

The Menu Editor looks and works like the Windows Explorer with its tree structure:



Result of menu customization

When you finish editing a menu, both the System Control Repository and the Client Data File on your workstation are updated immediately. In client/server environments, other users will see the menu changes the next time they log on to the system.

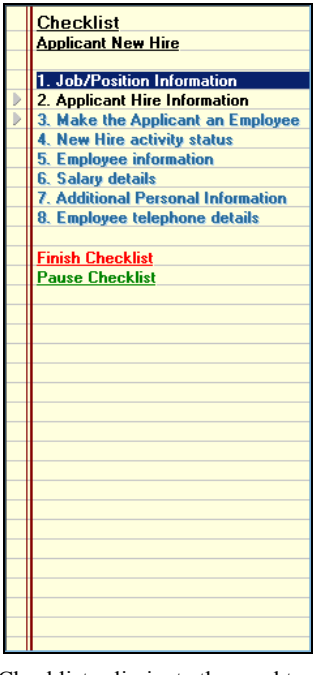
☞ *Refer to* **Maintaining Menus** *(on page 105) for more detailed information on editing your menus.*

Workflow capabilities

Recording and maintaining employee information requires many tasks. You may use several forms in the system to complete these tasks, entering and displaying various employee information. You can use the checklist feature to design business processes that utilize the forms required to record and maintain employee information.

Checklists can link items such as forms, dialogs, report groups, and other checklists to guide users through a process. Each of these items can then be completed consecutively, using the checklist to navigate them. Checklists help users identify the tasks they need to complete, as well as how much they've completed in a process.

For example, a checklist called 'New Hire' is delivered. This checklist contains all the items that need to be completed in order to add a new employee to the system, and optional information you might want to add:



Checklists eliminate the need to navigate to individual items. They also ensure that all the items that are part of a workflow are presented for completion. When you access a checklist, you are presented with a list of items in the sequence in which they should be completed. After they are created, checklists can be modified or removed as needed.

Local and universal checklists

A checklist can be local or universal:

- Local checklists are stored on a user's PC in the Checklist subdirectory. They automatically appear on the user's Bookmark menu and Favorites toolbar.
- Universal checklists are stored in the System Control Repository so all users can access them. They must be added to the menu using the Menu Editor. This process automatically updates the Navigator.

Creating a new checklist

A wizard is delivered to help you maintain and create new checklists. You can also use the Edit Utility (EDIT) to maintain existing checklists.

The wizard gather information and is very intuitive to use. The checklist is created after the wizard is completed.

Creating a decision point dialog

The last option in the wizard (through Advanced Features) is to create links to other checklists. You do this by entering the checklist name. If you enter more than one name, it creates a dialog box listing the checklists the user can select. The dialog then becomes a 'decision point'—the user's entry will indicate the next action the checklist performs. You can place a 'decision point' at the beginning or the end of a checklist process.

☞ *Refer to* **Designing a Business Process** *(on page 51) for more detailed information on checklists and using the checklist wizard to create checklists.*

PART 2

Personalizing Option Lists, Menus, and Checklists

In This Section

CHAPTER 3

Maintaining Option Lists

In This Chapter

Introduction

When using option lists to complete a form, you are rarely concerned about the type of option list you are using. In fact, there is no visible difference among the different types of option lists when working with a form. However, when maintaining option lists, you need to be aware of the different types of option lists and how they are maintained. Typically, delivered option lists are modified and new option lists are created during the implementation of the system. Maintenance can be performed at any time.

Tasks

This section explains the following:

- Accessing the Option List Editor
- Adding an item to a universal option list
- Adding an item to an organization-specific option list
- Modifying an item's description
- Modifying an item's status
- Removing an item from an option list
- Displaying an option list

Prerequisites

Before you can maintain option lists, you must have The Solution Series installed and have reviewed the delivered option lists.

You must also have the authority to add, change, and delete option list contents.

Questions answered

The following questions are answered in this section:

1. What are the different types of option lists?
2. What is the Option List Editor (CSUPDT) and what is its purpose?

Option list types

There are three basic types of option lists:

- Universal
- Type 9
- Organization-specific

All of these option list types appear the same to the person using them. Their types are important only from a maintenance point of view.

Universal option lists

Universal option lists are delivered with the system and are populated. These option lists are available to all organizations, including the delivered test organizations. In general, you can add to or remove options from these lists, but you will need to check each option list's documentation to be sure.

Note: *To check an option list's documentation, you use the What's This help for a list box.*

If you add an option to a calculation option list, you need to add the logic to process the option you add.

The Marital Status option list (HR04), used on the Additional Personal And ID Information form (02-SCR), is a universal option list. As delivered, it contains the following codes and descriptions:

Code	Description
D	Divorced
L	Legally Separated
M	Married
S	Single
W	Spouse Deceased

Universal option lists have five-position names, with a blank in the fifth position. The Marital Status option list is named HR04.

Type 9 option lists

Type 9 option lists are so named because they have a 9 in the fifth position of their names. For example, the Insurance Carrier option list is named BA629.

Cyborg delivers a set of populated Type 9 option lists. The options in these lists are available only to the delivered test companies, those whose organization IDs start with the number 9. They are intended to be used for testing purposes only and may not be meaningful to your organization.

For testing purposes, you can add test organization-specific options to the delivered Type 9 option lists, but you must do so using the Edit Utility (EDIT). These new options would then be available only to the test companies.

If you add options to the Type 9 option lists, but do not make them test organization-specific, they are available to all of your live organizations—those whose organization IDs do not start with a 9—found on the Employee Database. This allows you to hide the options that are applicable only to Cyborg's test organizations.

Organization-specific option lists

You can create option lists that are specific to an organization. For example, you may have organizations that each have unique perquisites. The perquisite options would be defined, along with their Organization IDs, making them available only to that particular organization.

To create an organization-specific option list, use the Edit Utility (EDIT). You must:

- Associate each option in the list with an organization
- Verify that there is a 'Y' in the fifth position of the option list's name

Note: Because of the naming convention requiring a 'Y' in the fifth position, these option lists are sometimes referred to as type-Y option lists.

☞ *Refer to the Technical Administration and the Cyborg Scripting Language documentation for information on using the Edit Utility (EDIT).*

Naming conventions for delivered option lists

As a naming convention for delivered option lists, the first two positions of the name reflect the component or solution with which the option list is associated. For example, Human Resource option lists begin with the letters 'HR'. Examples include option lists HR09 (Activity Codes) and HR10 (Employee Status). Salary Administration option lists begin with the letters 'SA', and so forth.

Advanced option list processing

In addition to supplying a list of standard options, option lists can also contain items that have calculation or relational editing logic. Calculation and relational editing logic are written in the Cyborg Scripting Language.

Calculation option lists

When an option list has calculation logic attached to it, it is called a calculation option list. For example, Appraisal Ratings (HR16) is a calculation option list. Logic is embedded for each rating, identifying the maximum position in range attainable by an employee if he or she receives the performance rating specified.

Modification of the calculation logic requires knowledge of the Cyborg Scripting Language.

Relational option lists

When an option list has relational logic associated with it, it is called a relational option list. It contains embedded Cyborg Scripting Language code that relates specific conditions to the values of the option list.

Modification of the relational editing logic requires knowledge of the Cyborg Scripting Language.

Option list documentation

Option list documentation can be viewed online. In addition, the One-Stop Document for each component of the system contains information on the specific option lists used for that component. For example, the Using Salary Administration manual contains an appendix covering each option list used in Salary Administration processing.

Apply the Concept
Based on your understanding of the option list types and naming conventions as explained in this concept, which of these two option lists would contain values that could be used by all organizations, even delivered test organizations—HR04 or HR459?

Option List Editor

You can use the Option List Editor (CSUPDT) to maintain existing option lists. You can add a new item to an existing option list, change information about an existing item, or delete an item. To create a new option list or delete an option list, you must use the Edit Utility (EDIT).

☞ *Refer to the Online Cyborg Scripting Language/English Language Programming documentation for details on adding and deleting option lists.*

You can use the Option List Editor (CSUPDT) for the following types of option lists:

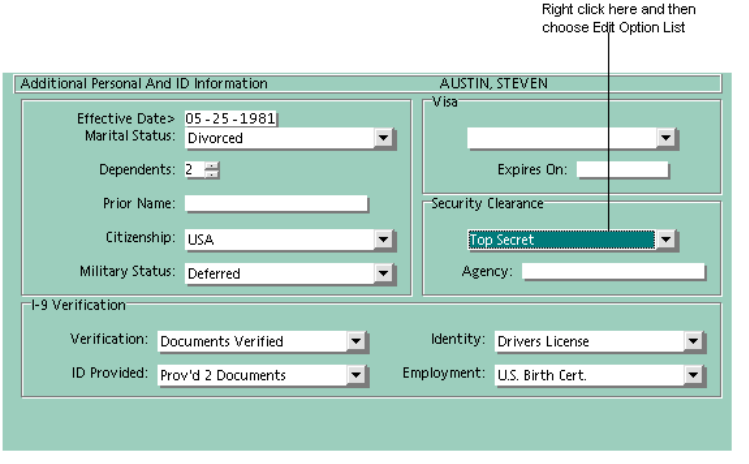
- Universal
- Type 9
- Organization-specific

Universal, type 9, and organization-specific option lists can contain calculation or relational logic. You will always use the Edit Utility (EDIT) to edit an option's calculation or relational logic, or to add documentation. You will use the Option List Editor (CSUPDT) to edit the option list's items.

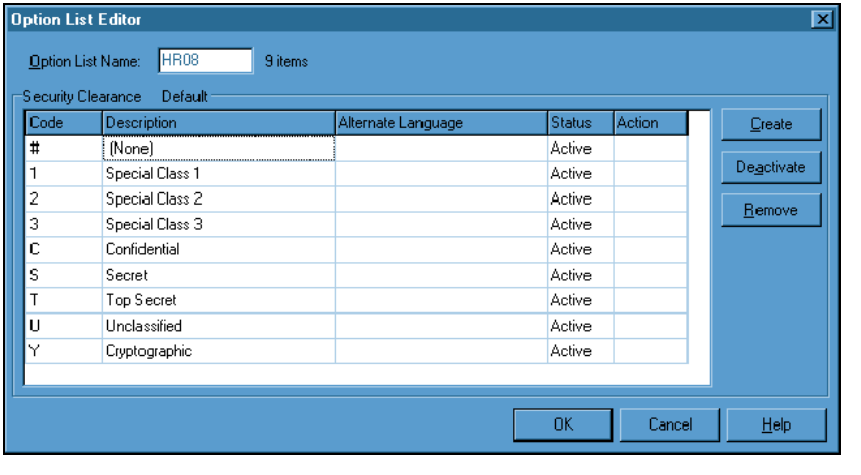
Option List Editor access

You can access the Option List Editor (CSUPDT) from a list box, the Navigator, or from the menus.

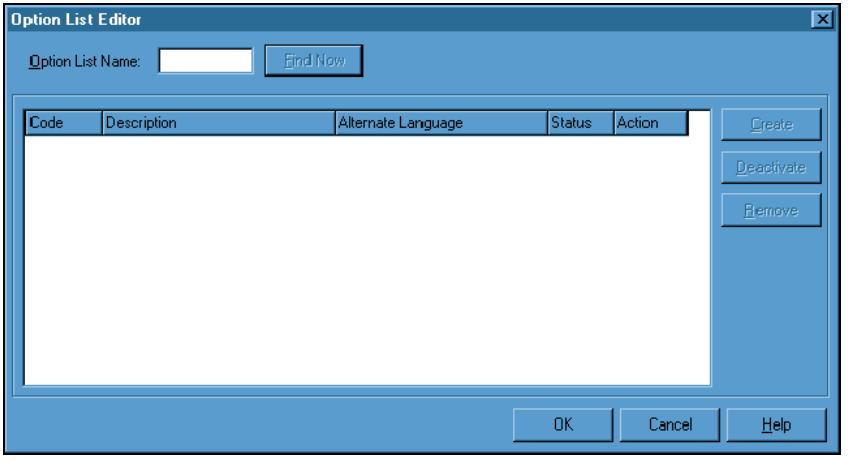
The simplest and quickest way to access the Option List Editor (CSUPDT) is by right-clicking on a list box. The system automatically displays the detailed information for the option list used for that list box. For example, if you access the Option List Editor (CSUPDT) from the Security Clearance list box on the Additional Personal And ID Information form (02-SCR)...



… the resulting display will look like this:



If you access the Option List Editor (CSUPDT) from the Navigator or from the menus, you need to supply the name of the option list. Accessed from the Navigator or the menus, the dialog box looks like this:



Note: *If you set the Options dialog to include technical details, the five-position option list name is displayed in the status bar when the pointer is clicked in a list box.*

See also:

- Accessing the Option List Editor from a list box ***(on page 38)***
- Accessing the Option List Editor from the Navigator ***(on page 39)***

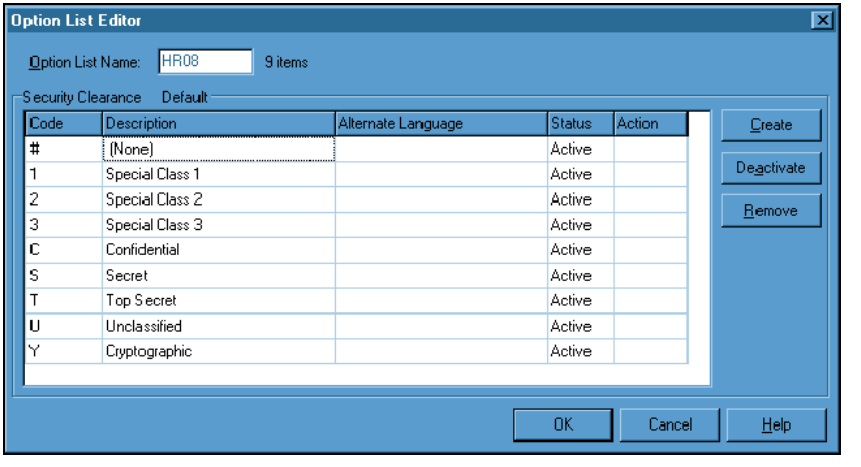
For detailed instructions for accessing the Option List Editor (CSUPDT).

Information displayed in the Option List Editor

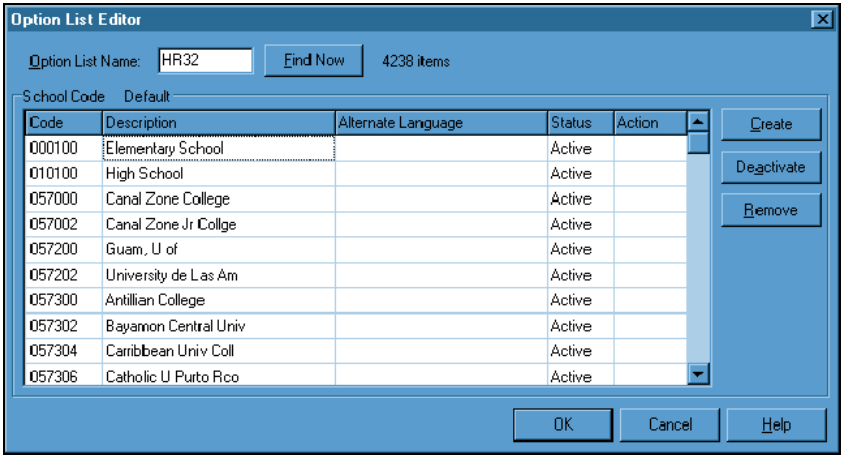
For universal and type 9 option lists, the Option List Editor (CSUPDT) displays the following information:

- Name of the option list
- Number of items in the list
- Title of the option list
- Default (or country label for a variant option list)
- Code (sorted by numeric and then alphabetic values)
- Description—the alphanumeric description of the code
- Alternate Language—if defined, the translation of the description
- Status—Active or Inactive
- Action—filled in by the system when you choose Create or Remove

The following is an example of the Option List Editor (CSUPDT) display for the Security Clearance option list (HR08):

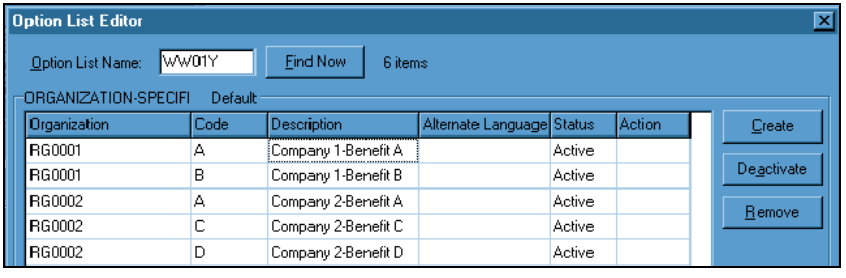


If there are more items than can be shown at once, a vertical scroll bar is displayed, as shown in the following figure of the School Code option list (HR32):

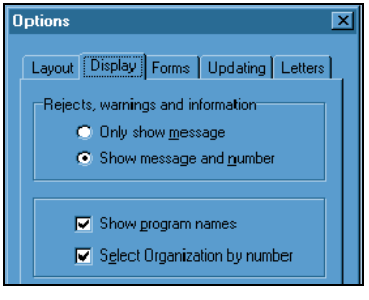


Note: *Type 9 option lists (those with a 9 in the fifth position of the option list name) will only display universal values. Test organization values will not be displayed in the Option List Editor dialog (CSUPDT).*

Information displayed for an organization-specific option list is the same as for universal and type 9 option lists, with the addition of the organization. This is shown in the following example of an organization-specific option list:



To show only the organization number in the Organization column, verify that the 'Select Organization by number' check box is checked on the Display tab of the Options dialog box (accessed through the Change Options task within the User Tools process of the User Tools component of the Navigator). If this box is not checked, both the organization name and number are displayed:



Information required to add an item to an option list

The rules for adding an item to an option list depend on the option list type.

Rules for universal and type 9 option lists

To add an item to a universal or type 9 option list, you must have the following information:

- Code—the value to be stored in a record
- Description—the alphanumeric description of the code that will display in the drop-down list box
- Alternate Language—if you are using more than one language in the system, this is the description in the alternate language

Note: If you want to add a test organization-specific option to a type 9 option list, you must use the Edit Utility (EDIT).

See also:

- Adding an item to a universal option list ***(on page 40)***

For detailed instructions for adding an item to a universal option list.

Rules for organization-specific option lists

Options in an organization-specific option list must always be associated with an organization. This allows a different group of options to be associated with each organization while still using the same option list. When you access a list box tied to an organization-specific option list, its drop-down list contains only those descriptions associated with the organization for the current employee.

Suppose you defined an option list called 1234Y with the following values:

Organization	Code	Description
111111	A	Company 1-Benefit A
111111	B	Company 1-Benefit B
222222	A	Company 2-Benefit A
222222	C	Company 2-Benefit C

Based on these definitions, when you process a form, the drop-down list for option list 1234Y will be as follows:

Current Organization	This list displays
111111	Company 1-Benefit A Company 1-Benefit B
222222	Company 2-Benefit A Company 2-Benefit C

See also:

■ Adding an item to an organization-specific option list ***(on page 42)***

For detailed instructions for adding items to an organization-specific option list.

Modification of option list items

Using the Option List Editor (CSUPDT), you can modify the description, alternate language, and status for an item. You can not change the code itself. If you need to modify a code, you must delete the item and then add it again with the correct code.

Status

Option list items have an active or inactive status. Items with an active status can be selected by users.

Using the Option List Editor (CSUPDT), you can change an item's status from active to inactive. An item with an inactive status does not display in the list, and therefore can not be selected. It does, however, remain in any records that already contain it. Inactive items display in a different color than active items.

A caution when removing option list items

Exercise caution when removing items from an option list. If you are not sure that it is still in use, consider changing an item's status to inactive rather than removing it.

If you are certain that no employee records contain the item, you can safely delete it. However, if you delete an item from an option list and the option still exists in employee records, problems can occur. These problems will surface when a form is opened that accesses the option list for an employee whose record still contains the now-invalid code. The drop-down list in the list box using the option list will appear blank, suggesting that it contains no value. You must select an option to replace the code in the employee's record.

Impact of option list maintenance

When you finish editing an option list, both the System Control Repository and the Client Data File on your workstation are updated immediately. You may verify option list contents at any time by using the Option List Display/Report form (CDLIST). Other users will see the option list changes the next time they press Enter.

See also:

- Modifying an item's description ***(on page 43)***

For detailed instructions for modifying an item's description.

- Modifying an item's status ***(on page 44)***

For detailed instructions for modifying an item's status.

- Removing an item from an option list ***(on page 45)***

For detailed instructions for removing an item.

- Displaying an option list ***(on page 46)***

For detailed instructions for displaying an option list.

Apply the Concept

Based on your understanding of the Option List Editor (CSUPDT) functionality as explained in this concept, indicate which of the following tasks you can complete after accessing it:

Add a new item to an existing option list
Add a new option list
Change information about an existing item
Delete an item
Delete an option list

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Accessing the Option List Editor from a list box

To access the Option List Editor (CSUPDT) from a list box, follow these steps:

1. Position the pointer in the list box

Position the pointer in the list box that uses the option list to be edited.

For practice, access the Additional Personal And ID Information form(02-SCR) for employee 1234, and then position the pointer in the Marital Status list box. Access this form by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Additional Personal And ID Information

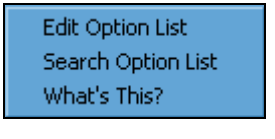
2. Right-click

Right-click the list box to display the selection dialog.

For practice, right-click.

3. Choose Edit Option List

Select Edit Option list from the options that are displayed.



The Option List Editor (CSUPDT) displays the detailed information for the requested option list.

For practice, select Edit Option List.

See also:

- Option List Editor access ***(on page 31)***

For more information on accessing the Option List Editor (CSUPDT).

Accessing the Option List Editor from the Navigator

To access the Option List Editor (CSUPDT) from the Navigator, follow these steps:

1. Access the Option List Editor (CSUPDT)

Access this dialog by making the following selections from the Navigator:

Component:	Development Tools
Process:	Option Lists
Task:	Edit

For practice, access the Option List Editor (CSUPDT).

2. Enter the Option List Name

Type the name of the option list to be edited.

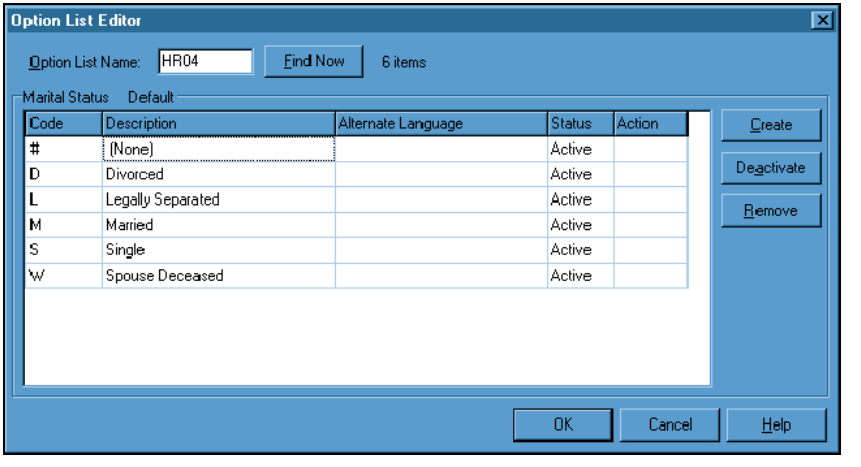
For practice, type 'HR04'.

3. Click Find Now

The system displays the detailed information for the requested option list.

For practice, click Find Now.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



See also:

- Option List Editor access ***(on page 31)***

For more information on accessing the Option List Editor (CSUPDT).

Adding an item to a universal option list

In this Guided Practice, you will add a new item to the Hire Source option list (HR21). ACME Manufacturing is now listing its open positions on its web page and wants to track applicants who learned of openings that way. To complete the Guided Practice, display the Phone Numbers And Employment Information form (03-SCR) for employee Steve Austin, 1234, in organization 999999.

Access this form by making the following selections from the Navigator:

Component: Employee Resourcing
Process: Maintain Basic Employee Details
Task: Telephone/Previous Applicant Info

To add an item to a universal option list, follow these steps:

1. Access the Option List Editor (CSUPDT)

Access the Option List Editor (CSUPDT) from a ***list box*** (see "Accessing the Option List Editor from a list box" on page 38) or the ***Navigator*** (see "Accessing the Option List Editor from the Navigator" on page 39).

For practice, position the pointer in the Employee Source list box, right-click, and select Edit Option List.

2. Click Create

A blank line is inserted, allowing you to add the new item.

For practice, click Create.

3. Enter the Code

Type a unique code or value. The length of the code depends on the particular option list with which you are working.

For practice, type '51'.

4. Enter the Description

Type a description of up to 20 characters for the code. This is the description that will be displayed in the drop-down list box.

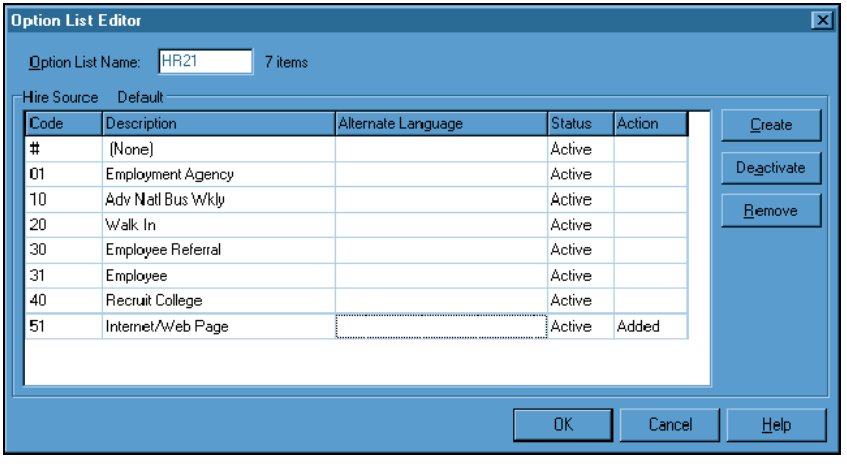
For practice, type 'Internet/Web Page'.

5. Enter the Alternate Language

If an alternate language is being used, type the description for the code in that language.

For practice, leave this text box blank.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:

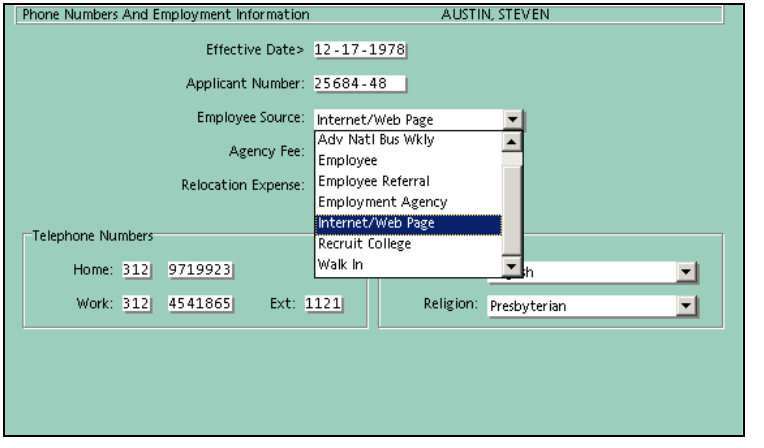


6. Click OK or press Enter

No items are added to the option list until you click OK. When OK is clicked, the new item is immediately added to the option list. No confirmation message is displayed.

For practice, click OK.

If you completed the Guided Practice, the contents of the option list should look similar to the example that follows:



See also:

- Information required to add an item to an option list ***(on page 35)***

For more information on adding items to an option list

Adding an item to an organization-specific option list

To add an item to an organization-specific option list, follow these steps:

1. Access the Option List Editor (CSUPDT)

Access the Option List Editor (CSUPDT) from a ***list box*** (see "Accessing the Option List Editor from a list box" on page 38) or the ***Navigator*** (see "Accessing the Option List Editor from the Navigator" on page 39).

The Option List Editor dialog (CSUPDT) is displayed. Only non-test organization values are shown.

For practice, access an organization-specific option list.

2. Click Create

A blank line is inserted, allowing you to add the new item. The organization number defaults to the organization that is displayed on the Status bar.

For practice, click Create.

3. Enter the Code

Type a unique code or value. This value, together with the organization number, will be stored in the database.

For practice, type a code.

4. Enter the Description

Type a description of up to 20 characters for the code. This is the description that will be displayed in the drop-down list for the list box.

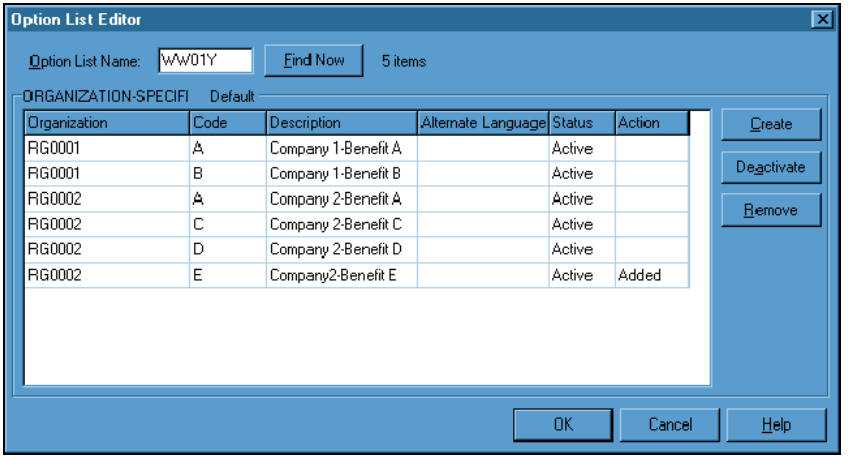
For practice, type a description.

5. Enter the Alternate Language

If an alternate language is being used, type the description for the code in that language.

For practice, leave this text box blank.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



6. Click OK or press Enter

No items are added to the option list until you click OK. When you click OK, the additions are made immediately. No confirmation message is displayed.

For practice, click OK.

See also

- Information required to add an item to an option list ***(on page 35)***

For more information on adding items to an option list

Modifying an item's description

To modify an item's description, follow these steps:

1. Access the Option List Editor (CSUPDT)

Access the Option List Editor (CSUPDT) from a ***list box*** (see "Accessing the Option List Editor from a list box" on page 38) or the ***Navigator*** (see "Accessing the Option List Editor from the Navigator" on page 39).

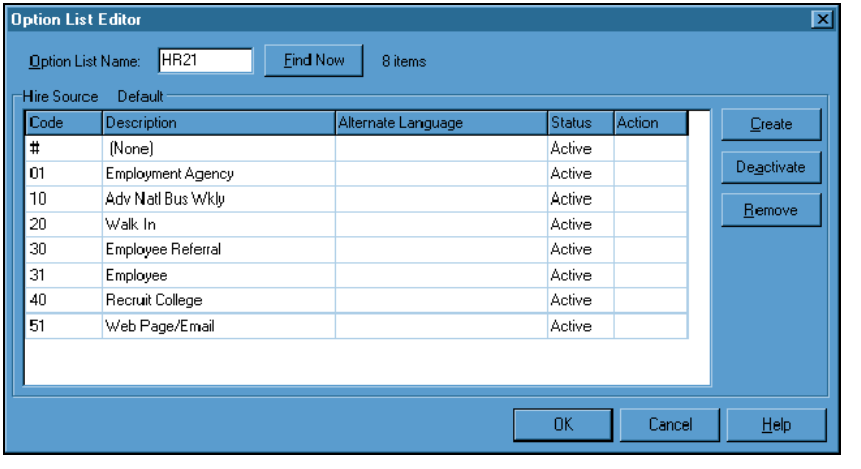
For practice, access the Option List Editor (CSUPDT) for option list HR21.

2. Modify the description

To change a description, double-click on its text box and then type over the information displayed.

For practice, edit code 51, and change the description to 'Web Page/Email'.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



3. Click OK or press Enter

No changes are made to the option list until you click OK. When you click OK, the changes are made immediately. No confirmation message is displayed.

For practice, click OK.

See also:

- Modification of option list items ***(on page 36)***

For more information on modifying option lists.

Modifying an item's status

To modify an item's status, follow these steps:

1. Access the Option List Editor (CSUPDT)

Access the Option List Editor (CSUPDT) from a ***list box*** (see "Accessing the Option List Editor from a list box" on page 38) or the ***Navigator*** (see "Accessing the Option List Editor from the Navigator" on page 39).

For practice, access the Option List Editor (CSUPDT) for option list HR21.

2. Position the pointer on the line of the item to be modified

Click on the line for the item that is to be changed. Note that you can not position the pointer in the Code, Status, or Action text box.

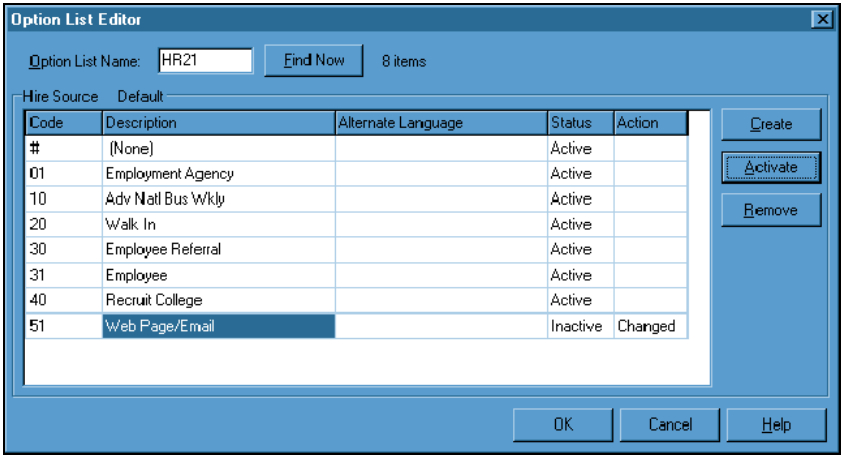
For practice, position the pointer on the line for code 51.

3. Click Deactivate or Activate

Depending on the item's current status, either the Deactivate or Activate button is displayed. If the item's current status is Active, click Deactivate to change the status to Inactive. If the item's current status is Inactive, click Activate to change its status to Active.

For practice, click Deactivate.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



4. Click OK or press Enter

The changes are made immediately. No confirmation message is displayed.

For practice, click OK.

See also

- Modification of option list items ***(on page 36)***

For more information on modifying option lists.

Removing an item from an option list

To remove an item from an option list, follow these steps:

1. Access the Option List Editor (CSUPDT)

Access the Option List Editor (CSUPDT) from a ***list box*** (see "Accessing the Option List Editor from a list box" on page 38) or the ***Navigator*** (see "Accessing the Option List Editor from the Navigator" on page 39).

For practice, access the Option List Editor (CSUPDT) for option list HR21.

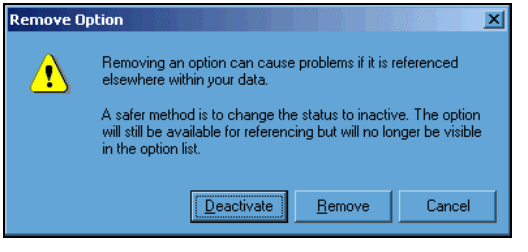
2. Position the pointer on the line of the item to be removed

Click on the line for the item that is to be removed. You may not position the pointer in the Code, Status, or Action text box.

For practice, position the pointer on the line for code 51.

3. Click Remove

Click Remove in the Option List Editor dialog (CSUPDT). After you click Remove, the system displays a Remove Option warning message dialog, asking you to confirm the deletion.



For practice, click Remove.

4. Click Remove

If you want to remove the item, click Remove in the Remove Option dialog. The item is not removed yet. Its action changes to 'Removed'.

If you have started the process of removing an option list item and you change your mind after clicking Remove, you may reverse the action by clicking on the Reinstate button that is displayed on the Option List Editor dialog (CSUPDT).

For practice, click Remove.

5. Click OK

Confirm the deletion by clicking OK. The item is removed from the option list.

For practice, click OK.

See also:

- Modification of option list items ***(on page 36)***

For more information on removing option list items.

Displaying an option list

To display an option list, follow these steps:

1. Access the Option List Display/Report form (CDLIST)

Access this form by making the following selection from the Navigator:

Component: Development Tools
Process: Option Lists
Task: Display

For practice, access the Option List Display/Report form (CDLIST).

2. Enter the Option List name

Type the exact name of the option list. This entry is case-sensitive. Use '=' as a wildcard.

To display all option lists alphabetically by name, type '=' in all positions of this text box. To display only the name and title of all option lists, type '=' in all positions of this text box and 'N' in the remaining text boxes.

For practice, type 'HR52'.

3. Enter a Code values preference

If you want the code values to be displayed, leave this text box blank (the default is 'Y') or type 'Y'. If you do not want code values to be displayed, type 'N'.

For practice, type 'Y'.

4. Enter a Documentation preference

If you want the documentation displayed, type 'Y'. Otherwise, leave this text box blank.

For practice, type 'Y'.

5. Enter a Calculations preference

If you want the calculation used to be displayed, type 'Y'. Otherwise, leave this text box blank.

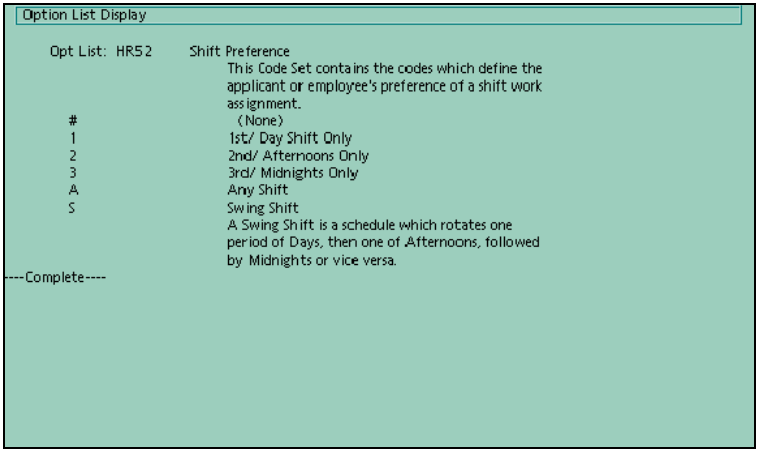
For practice, leave this text box blank.

6. Press Enter

Press Enter to generate and display the requested information.

For practice, press Enter.

If you completed the Guided Practice, the resulting form should look similar to the example that follows:



See also:

- Modification of option list items ***(on page 36)***

For information on displaying option lists.

Extended Practice

Your company has purchased laptop computers for your consulting staff, and you have been asked to add this item to the Company Property option list (HR24). Using the Option List Editor, add code 'P1' to option list HR24 and give it a description of 'Laptop Computer'.

After the new entry has been made, access the Company Personal Property form (22-SCR) for Jerry Jones, employee 1111 in Organization 999999, and record his newly assigned laptop computer. Access this form from the Navigator by making the following selections:

Component:  Employee Resourcing
Process: Maintain Additional Employee Details
Task:  Company Property

Review of Questions Answered

1. What are the different types of option lists?

2. What is the Option List Editor (CSUPDT) and what is its purpose?

CHAPTER 4

Designing a Business Process

In This Chapter

Introduction

Recording and maintaining employee information requires many tasks. You may use several forms to complete these tasks, entering and displaying various employee information. This section describes how you use checklist feature to design business processes that utilize the forms required to record and maintain employee information.

Tasks

The following tasks are discussed in this section:

- Creating a checklist
- Modifying a checklist
- Removing a checklist

Prerequisites

Before you can begin designing a business process using a checklist, you must be signed on to The Solution Series and have the authority to create checklists.

Questions answered

The following questions are answered in this section:

1. What is a checklist?
2. What are the differences between a personal checklist and a universal checklist?
3. What tool do you use to create a checklist?
4. What tool do you use to delete a checklist?
5. What tool do you use to control checklists?

Business processes

Your organization follows various processes to record, maintain, and manage employee information. When a new employee is hired, for example, your organization follows several business processes that ensure the employee's personal, benefit, and payroll information is entered in a timely manner. These processes could be documented in a procedure manual or summary form.

The Solution Series uses a tool, called a checklist, which you can use to design, create, and maintain business processes that use the forms required to maintain employee information. When used, checklists ensure that all the items that are part of a business process are presented and tracked for completion.

See also:

- Creating a personal checklist ***(on page 71)***
- Creating a universal checklist ***(on page 82)***

For detailed directions on creating a checklist.

Checklists

Checklists can link forms, dialogs, report groups, and other checklists within the system to guide you through a business process. Checklists help you identify the steps you need to complete and track your progress. Checklists can also be used to trigger emails and letters.

You can add a report group to a user-defined checklist, so that launching the report is part of a business task accomplished online. Report groups that are added to a user-defined checklist must already exist on the menu.

If you have not implemented checklists yet, you may want to consider creating some to complement the Interactive Workforce process. For example, you could create a new hire checklist that includes all the core forms you need to complete before you give the new employee access to Interactive Workforce

There are two types of checklists:

- Personal checklists
- Universal checklists

Personal checklists

Personal checklists are created by you; only you have access to them. Personal checklists are stored on your computer with an LCL filename extension.

See also:

- Creating a personal checklist ***(on page 71)***

For detailed directions on creating a personal checklist.

Universal checklists

Universal checklists are available to everyone. They are stored in the System Control Repository. The system assigns all universal checklists a number as they are created. They are identified in the System Control Repository with a record ID beginning with MML and followed by a six-digit number. The number indicates who created the checklist. Numbers 000000 through 499999 identify checklists created by anyone in your organization, and numbers 500000 through 999999 identify checklists created by Cyborg.

Checklists are assigned numbers in descending order. Whenever a checklist is created, the system takes the last assigned number, subtracts one and assigns the next number to that checklist.

A feature unique to universal checklists is that they can be linked to up to six other checklists. For example, after completing the checklist that records basic employee information, the checklist could present the option to access another checklist that records benefits, salary, or Position Administration information.

See also:

- Creating a universal checklist ***(on page 82)***

For detailed directions on creating a universal checklist.

Accessing a checklist

Checklists can be added to and accessed from the Bookmarks menu, Favorites toolbar, or the menus and Navigator. When you create a personal checklist, it is automatically added to your Bookmarks menu and Favorites toolbar. Universal checklists must be added manually to the menus and Navigator.

User profile considerations

You must have the proper authorization to create and modify checklists. Depending on your user profile authorization, you will be able to create and modify one of the following:

- Only personal checklists
- Only universal checklists
- Both personal and universal checklists
- No checklists

Note: Contact your Security Officer regarding your user profile.

Design considerations

Before you use the system to create a checklist, you should be aware of the capabilities and options that can affect the way checklists work.

Consider the following options and capabilities when designing checklists:

- Decision dialogs
- Special new hire processing
- Selecting the same effective date
- Identify items that are mandatory
- Identify forms that can not be re-entered
- Assign dependencies

The first three options listed are at the checklist level. The last three apply to one or more items within a checklist.

Decision dialogs

You can link a universal checklist to up to six other checklists through decision dialogs. Decision dialogs are displayed on completion of a checklist. You can create a checklist that uses forms to complete one business process and then displays the option to link to other checklists that complete other business processes.

You can also create a checklist that uses no forms but offers the option to link to other checklists. Designing a checklist in this manner allows you to display a decision dialog before using any form dialogs.

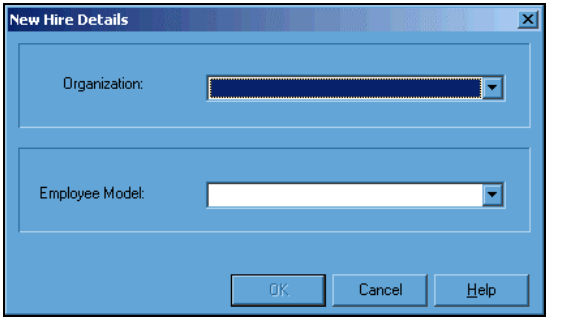
Using decision dialogs allows you to modularize your checklists so that common steps can be grouped in one checklist and unique steps in separate checklists. For example, if your organization has both union and non-union employees, you may have some steps that are common to both groups and others that are unique to each group. You can group the common steps together in one checklist, and link to two other checklists; one that is unique to union employees, and one that is unique to non-union employees.

New Hire checklist

You use templates called logical employee models when processing new hires. Each logical employee model contains default information to make the process more efficient. Your organization can have many logical employee models. When you process a new hire, you must identify the organization and which logical employee model is to be used.

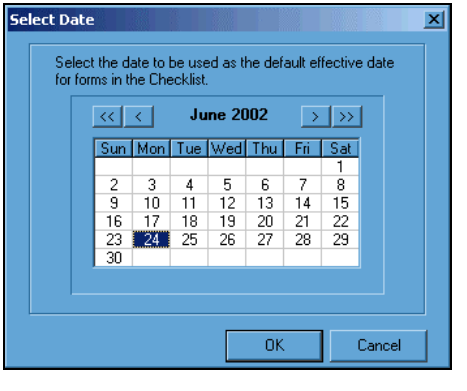
If you create a checklist that processes new hire information, you must identify it as such. Doing so causes special processing to occur that allows the person using the checklist to select the organization and logical employee model to use with the new hire.

When you identify a checklist as a new hire checklist, a New Hire Details dialog box similar to the following displays first when the checklist is accessed.



Same Effective Date

You can elect to use the same effective date for all items in a checklist. When you select this option, the Select Date dialog box will be displayed with the current date already selected when the checklist is accessed. The date that is selected from this dialog box will be used to populate the effective date for every item in the checklist.



Mandatory items

Some steps in your business process may be mandatory, others optional. You can select those forms that are mandatory. When the checklist is accessed, mandatory steps are identified with an arrow and must be completed before the checklist can be successfully finished.

Until the mandatory steps are complete, the Finish Checklist control will be displayed in red. The Finish Checklist control is displayed in green when all mandatory steps have been completed.

If the Finish Checklist control is available, the checklist can be stopped even though all mandatory items have not been completed. Stopping a checklist before mandatory items have been completed, however, cancels all further processing. A special option can be set that makes the Finish Checklist control unavailable until all mandatory items have been completed.

Forms that can not be re-entered

If a form in a checklist creates a record or sends a message, you may not want that form to be accessed more than once. The Employee Transfer form (ET-SCR), for example, is used to transfer records from one organization to another and would not be re-entered.

When you design a checklist, you can select which forms can not be re-entered. Selecting forms that can not be re-entered prevents the person using the checklist from accessing the form again after the step that uses that form has been completed.

Dependencies

Some steps in your checklist may be dependent upon the completion of another step. If this is the case, you can identify these relationships when the checklist is created. Dependent steps can not be accessed until the step on which they are dependent has been completed.

Example checklist

Cyborg delivers an example checklist called 'Hire a New Employee'. Although it displays as one checklist on the Navigator and menus, it is actually five universal checklists working together. These checklists use many of the options available to you when you create your checklists. Consider looking at how these are constructed and how they work before creating your own. They can give you an idea of how checklists work in general and how the options you select affect how checklists work.

The Cyborg-delivered checklists can be viewed using the Checklist wizard.

The Checklist wizard

The Checklist wizard is the tool you use to create checklists. The Checklist wizard walks you through the tasks and options necessary to create a checklist step-by-step.

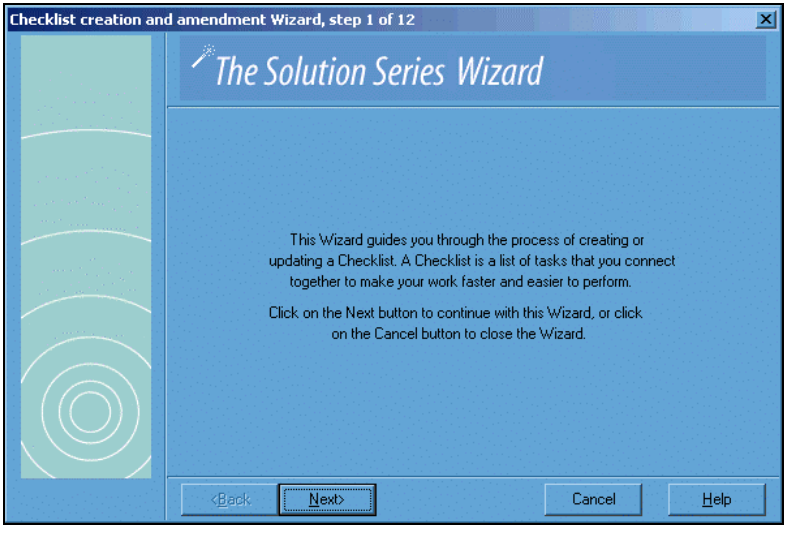
Creating a checklist can take up to 12 steps. The following is a summary of each step:

1. Welcome
2. Identify checklist type
3. Name the checklist
4. Add items to the checklist and identify their sequence
5. Indicate if it is a new hire checklist and if the same effective date should be applied to every item
6. Change the description of the items (if desired)
7. Select items that are mandatory
8. Finish the checklist or select additional advanced features (Steps 9–11)
9. Assign items that can not be re-entered
10. Assign dependencies
11. Build links to other checklists (universal checklists only)
12. Finish

The Checklist wizard will guide you through each step, one-by-one. It may skip one or more steps, depending on your user profile, the type of checklist you are creating, and the options you select. For example, if your user profile only allows you to create personal checklists, the wizard will skip Step 2.

As you progress through the steps of creating a checklist, the Checklist wizard indicates which step you are on in its title bar.

The following example shows the first step of the Checklist wizard:



Note: When you create a universal checklist, the number assigned to the checklist will also display in the title bar.

See also:

- Creating a personal checklist ***(on page 71)***
- Creating a universal checklist ***(on page 82)***

For detailed directions on using the Checklist wizard to create a checklist.

- Modifying a personal checklist ***(on page 89)***
- Modifying a universal checklist ***(on page 95)***

For detailed directions on using the Checklist wizard to modify a checklist.

Navigating the Checklist wizard

There are three buttons that you can use to navigate through the Checklist wizard:

- Back—moves you backwards one step
- Next—moves you forward one step
- Cancel—exits the wizard

When appropriate, the Next button is replaced by a Finish button. The checklist is not created until you click Finish. Until you do so, you will be able to use the Back and Next buttons to move back and forth between the steps and make changes before the checklist is actually created.

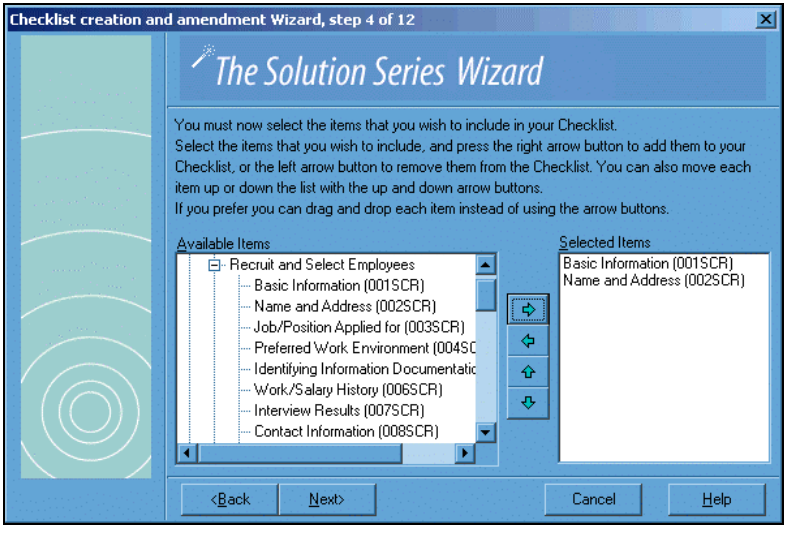
Naming the checklist

When you create a checklist, you name it in Step 3 of 12 of the Checklist wizard. Use a name of up to 30 characters. The name you use will be shown on the Bookmarks menu and Favorites toolbar for personal checklists and on menus and the Navigator for universal checklists, if added.

Selecting and renaming checklist items

You select items for your checklist in Step 4 of 12 of the Checklist wizard. You can have up to 999 items in a single checklist.

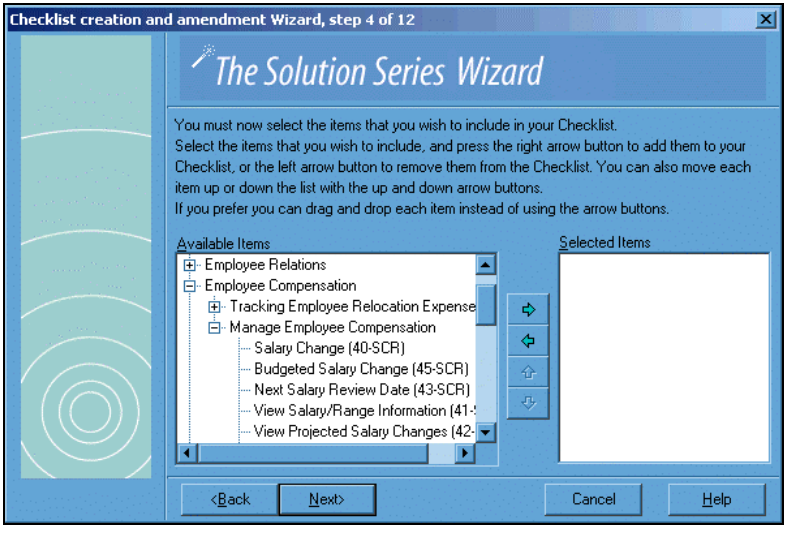
The following example shows Step 4 of the Checklist wizard.



Navigation in the Available Items pane

You select items or forms from the Available Items pane. Forms are at the lowest level of the tree in the pane. If you are familiar with using the Windows Explorer, navigating through the Available Items pane will be familiar to you. If an item has forms below it that are not displayed, it will have a '+' next to it. When an item is expanded, its '+' sign is changed to a '-' sign. Forms are shown without either symbol.

In the following example, 'Employee Compensation' and 'Manage Employee Compensation' have been expanded. The forms under 'Manage Employee Compensation' can be added to a checklist. Items such as 'Employee Relations' and 'Tracking Employee Relocation Expenses' have sub-items that are not displayed. In other words, they are 'collapsed'.



The following navigation and display options are available.

- To expand a particular item, click the '+' sign next to the item.
- To collapse a particular item and its sub-items, click the '-' sign next to the parent item.

Adding, moving, and deleting checklist items

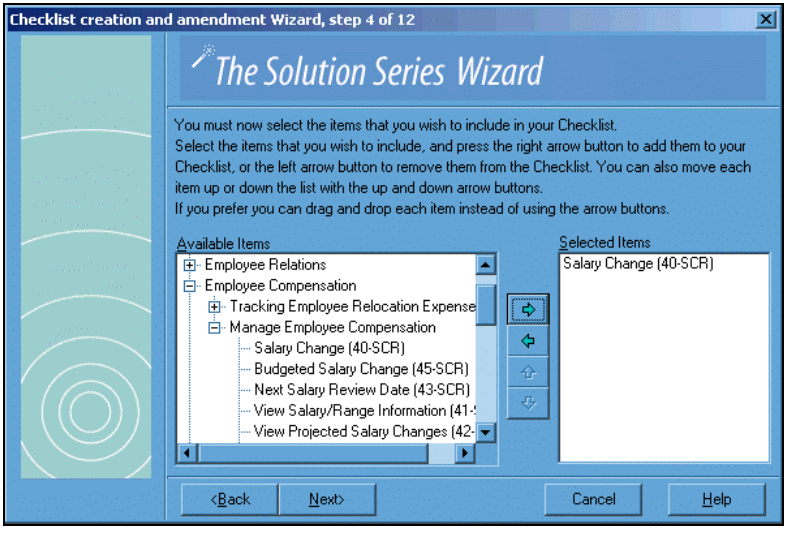
There are two ways that you can add, move, or delete checklist items:

- Drag them
- Use the arrow buttons

You can add items by dragging them from the Available Items pane to the Selected Items pane. If you want to delete an item that you have added, drag the item back to the Available Items pane. After you have added several items, you can change the order by dragging an item before or after other items within the Selected Items pane.

The items in the Available items pane are the same as those displayed on your Navigator. You can select any form listed.

The example below shows the Salary Change form (40-SCR) has been added to the Selected Items pane.



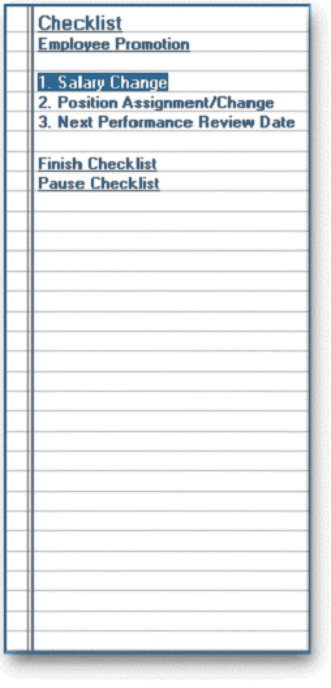
If you do not want to drag items, you can use the arrow keys to add, move, and delete items. To use any of the arrow keys, you must first select an item. To add an item, you would select it in the Available Items pane, and then click the right arrow button. After an item is in the Selected Items pane, you can select it and use the left arrow button to delete it or the up and down arrow buttons to move it before or after other items.

Note: *The order in which items display in the Selected Items pane determines the sequence in which they are listed when the checklist is accessed.*

Changing the description of an item

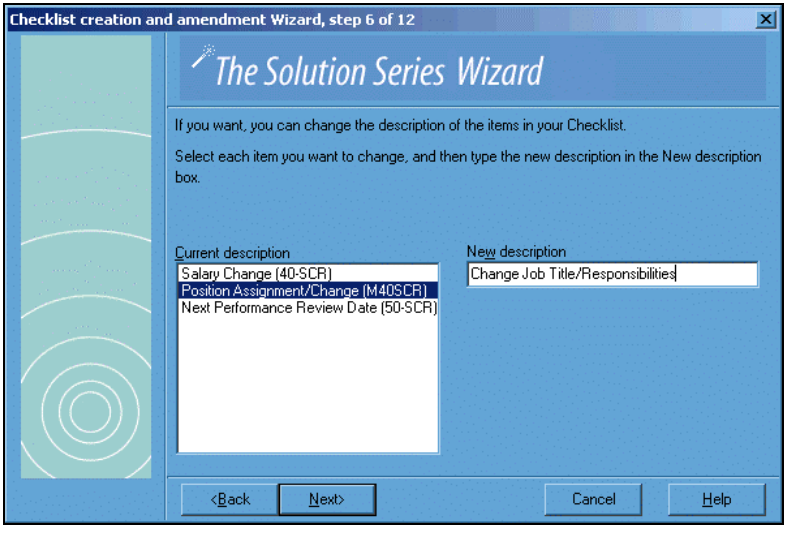
The forms that you select in Step 4 of 12 of the Checklist wizard display as steps in the Navigator when the checklist is accessed. By default, the description you see when you select an item will be shown in the checklist. The description also displays as a ToolTip for the previous and next buttons on the Checklist toolbar.

The following example shows the default descriptions of items selected for a checklist used to record employee promotion information.



In Step 6 of 12 of the Checklist wizard, you have the option of changing the default description of any item in the checklist. You can enter a description of up to 40 characters.

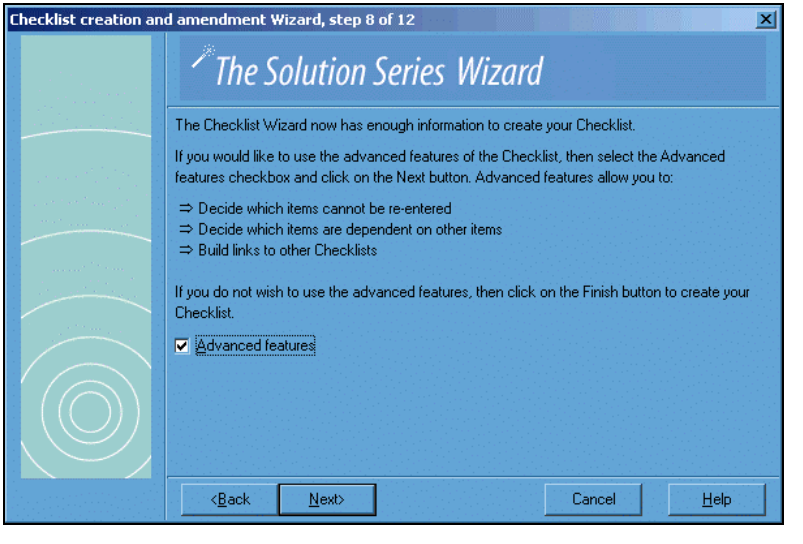
The second item in the example below, 'Position Assignment/Change', is being renamed to 'Change Job Title/Responsibilities':



Advanced features

In Step 8 of 12 of the Checklist wizard, you are given the option to finish the checklist you are creating or go on to select advanced features. Advanced features include selecting items that can not be re-entered, assigning dependencies, and for universal checklists, building links to other checklists.

There follows an example of Step 8 of 12 of the Checklist wizard:



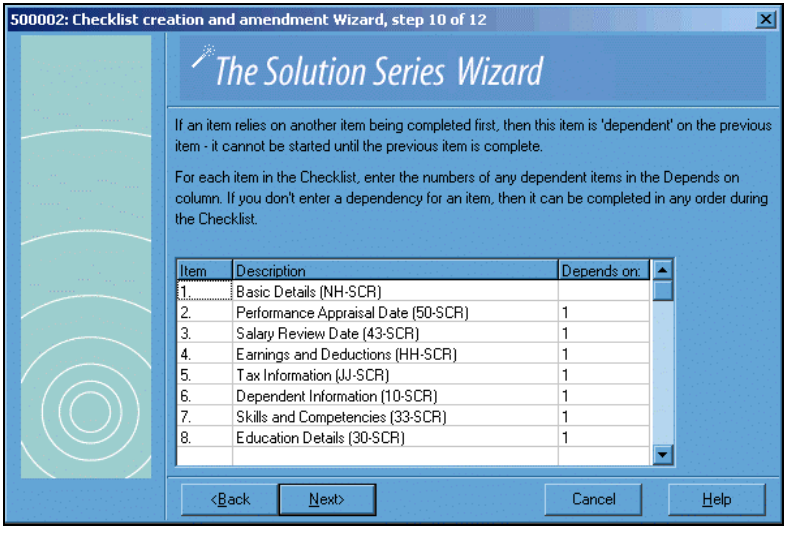
By default, 'Advanced features' is not checked and the 'Finish' button is displayed. If you want to use one or more of the advanced features, click Advanced features. When this

check box is checked, the 'Finish' button is replaced by a 'Next' button, allowing you to continue on to the advanced features.

Assigning dependencies

In Step 10 of 12 of the Checklist wizard, you can assign dependencies. Dependencies identify steps that must be completed before others can be accessed. You do so by entering the number of the step that must be completed in the Depends On column.

The following example shows that Steps 2 through 8 of the Cyborg-delivered 'New Hire' checklist are dependent on the completion of Step 1:



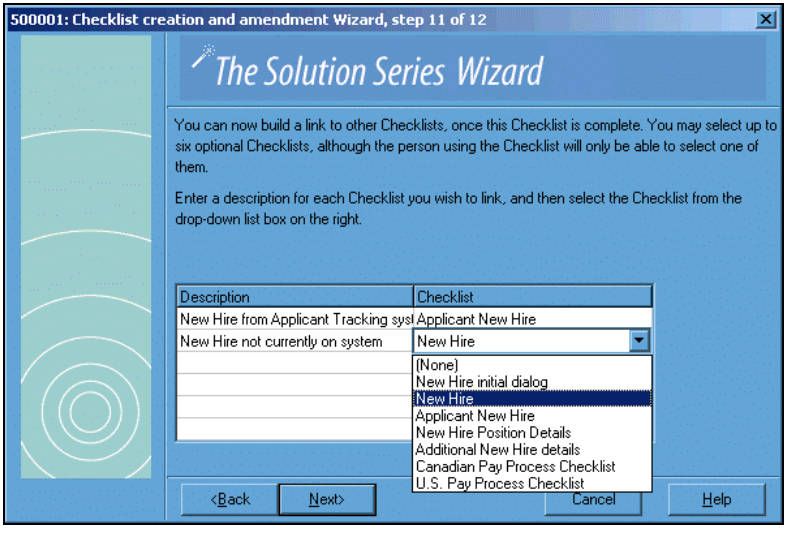
Links to other universal checklists

In Step 11 of 12 of the Checklist wizard, you can build links to other universal checklists. You can build links to up to six other universal checklists. When the checklist that you are creating is accessed and completed, the links to other universal checklists that you identify in this step are presented in a dialog of option buttons.

Note: *An option of 'None' is automatically included along with the other links that you specify. This gives the user of the checklist the option of completing the checklist without linking to another checklist.*

To create a link, you must enter a description and select the universal checklist from an option list. The universal checklist that you want to link to must already be created. The description that you enter displays in the dialog of options when the checklist is accessed and completed.

The following example shows the Cyborg-delivered New Hire initial dialog checklist linked to the Applicant New Hire and New Hire checklists.



Canceling the Checklist wizard

You can cancel the Checklist wizard at any time. When you do, you will lose any additions or changes that you have made in any of the steps. A warning message will remind you that your changes will be lost.

See also:

- Creating a personal checklist ***(on page 71)***
- Creating a universal checklist ***(on page 82)***

For detailed directions on creating a checklist.

Checklist maintenance

As your business processes change, you will need to maintain the checklists that address those processes. You can modify and delete checklists.

Checklist modification

Modifying a checklist is similar to creating one. To modify a checklist, you use the Checklist wizard. You will be guided through steps that are similar to those used to create a checklist.

When you modify a personal checklist, you will be presented with the option to add the checklist to the Favorites toolbar. If the checklist is already on the Favorites toolbar and you select this option, the checklist will be added again.

See also:

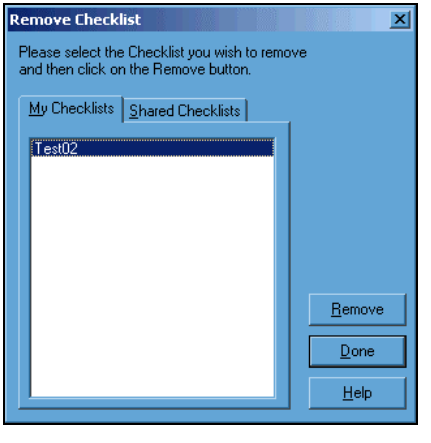
- Modifying a personal checklist ***(on page 89)***
- Modifying a universal checklist ***(on page 95)***

For detailed directions on using the Checklist wizard to modify a checklist.

Checklist removal

When you no longer need a checklist, you can remove it.

You use the Remove Checklist dialog box to remove a checklist. As shown below, there are two tabs on the Remove Checklist dialog box. Personal checklists are listed on the My Checklists tab and universal checklists on the Shared Checklists tab.



Removing a checklist does not automatically delete the checklist entry from the Bookmarks menu, Favorites toolbar, or custom menus. To remove a checklist entry from these parts of the system, you must manually delete it.

See also:

- Removing a personal checklist ***(on page 101)***
- Removing a universal checklist ***(on page 102)***

For detailed directions on removing a checklist.

☞ *Refer to* **Maintaining Menus** *(on page 105) for information on deleting a checklist from the menus or navigator.*

Checklists and communication events

As part of your business process, you may want to automate communication that should take place within your organization when checklists are used. For example, if you use a checklist to create the forms required for a new hire, you might want to automatically generate a letter welcoming a new employee to the company when the checklist has been completed. To accomplish this, after you have created a checklist, you would create a communication event for that checklist.

A communication event can be in the form of a letter or an email. Using the Communication Event Manager, you can set up a letter or email to be automatically generated when any of the following occur:

- A checklist is finished and all of the mandatory steps have been completed
- A checklist is finished and all of the mandatory steps have not been completed
- A checklist is paused

Controlling checklists using Edit

Most checklist options can be set using the Checklist wizard. There are, however, several options that can only be set using the Edit Utility (EDIT):

- The name of the Cyborg Scripting Language program to execute on finish
- Suppressing the summary dialog
- Disabling the Finish Checklist control until all mandatory items have been completed
- Clearing all forms the first time they are presented

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Creating a personal checklist

There are two types of checklists—personal and universal.

Note: *To create a personal or universal checklist, you must have the proper authority. If you do not have the authority to create checklists, the system will direct you to see your Cyborg administrator to change your user profile.*

To create a universal checklist, follow the steps in ***Creating a universal checklist*** (on page 82).

To create a personal checklist, follow these steps.

Note: *To create a personal checklist, you will use the Checklist wizard. Depending on your user profile and the options you select, the wizard may skip one or more steps.*

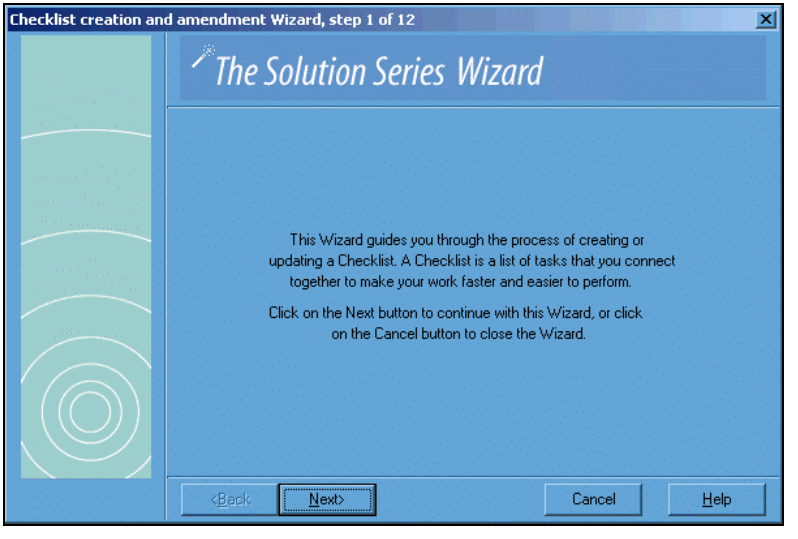
1. Access the Checklist creation and amendment Wizard

Access this wizard by making the following selections from the Navigator:

Component: User Tools
Process: User Tools
Task: Create/Modify a Checklist

For practice, access the Checklist creation and amendment Wizard.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



Welcome (1 of 12)

2. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

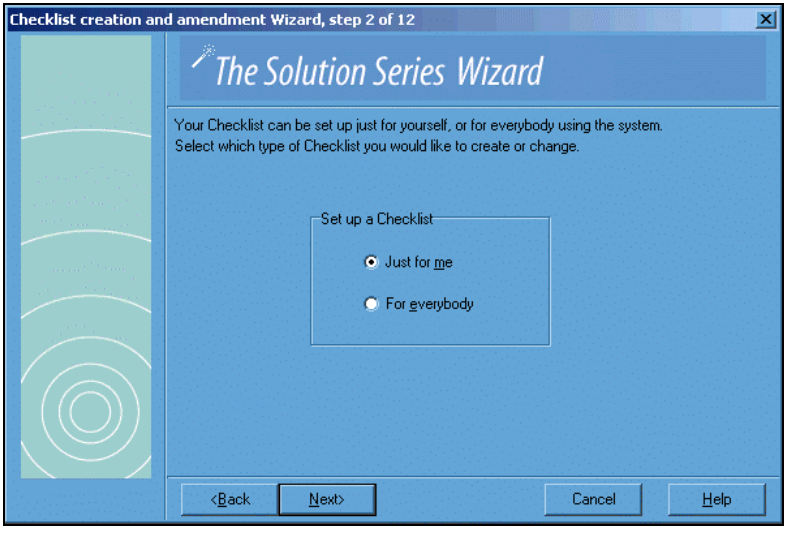
Checklist type (2 of 12)

3. Select 'Just for me'

Select 'Just for me' to create a personal checklist.

For practice, select 'Just for me'.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



4. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Checklist name (3 of 12)

5. Position the pointer in the New Checklist text box

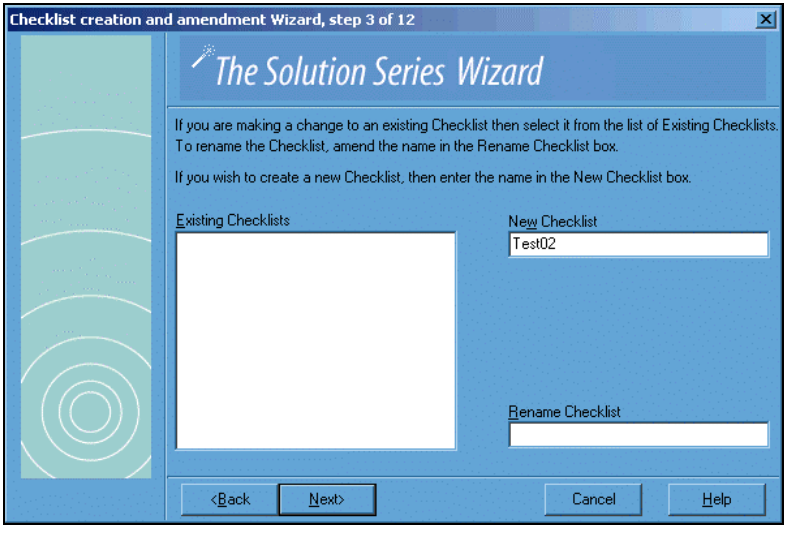
The insertion pointer displays in the New Checklist text box.

For practice,click in the New Checklist text box.

6. Enter the checklist name

Enter a name of up to 30 characters for the checklist.

For practice, type 'Test02'.



7. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Checklist items and sequence (4 of 12)

8. Drag an item to the Selected Items pane

Fully expand the tree view in the Available Items pane.

To add an item as part of your checklist, drag it from the Available Items pane to the Selected Items pane. To delete an item that you have added, drag the item from the Selected Items pane back to the Available Items pane.

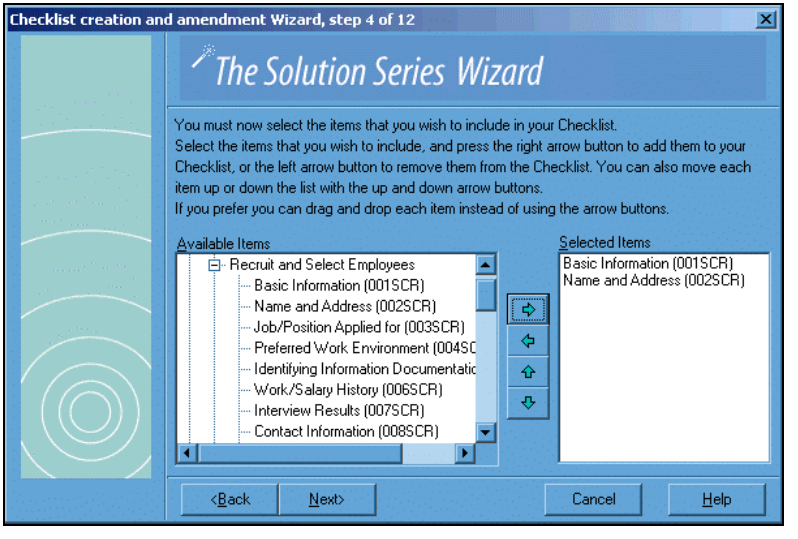
The items in the Available items pane are the same as those displayed on your Navigator minus checklists and dialogs.

The item is added to the Selected Items pane. Repeat this step to add more items to your checklist.

Note: The order in which items are displayed in the Selected Items pane determines the order in which they appear when you execute the completed checklist. You can change the order by moving an item within the Selected Items pane.

For practice, expand Employee Resourcing, and then expand Recruit and Select Employees. Then select Basic Information and Name and address.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



9. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Same effective date and new hire checklist (5 of 12)

10. Select Use the same Effective date for each item

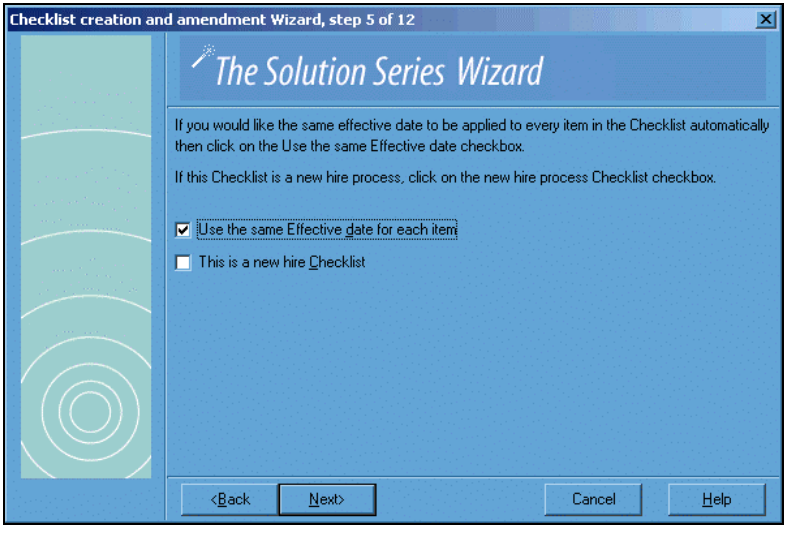
If you want the same effective date to be automatically applied to every item in the checklist, click this check box.

For practice, select this check box.

11. Select This is a new hire Checklist

If this is a new hire process, click this check box. This will invoke special processing when the checklist is executed.

For practice, do not select this check box.



12. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Item descriptions (6 of 12)

13. Select an item to change

If you want to change an item's description, select the item in the Current description pane. The description displays as a step name in the checklist and in a ToolTip for the next and previous buttons on the Selection toolbar when the item is the next or previous item in the checklist sequence.

The current description is displayed in the New description text box for you to edit.

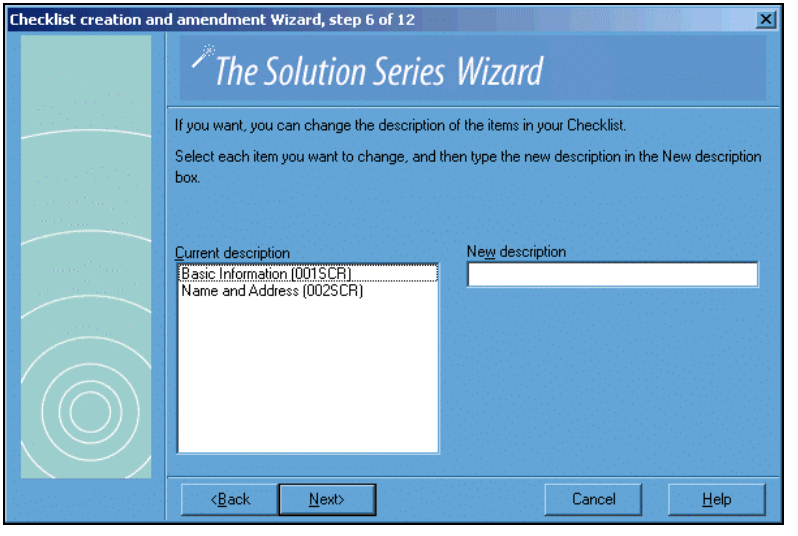
For practice, do not select an item.

14. Enter a New description

Enter a new description of up to 40 characters.

Repeat Steps 13 and 14 to change any other description.

For practice, do not enter a description.



15. Click Next

Click Next to continue creating a checklist.

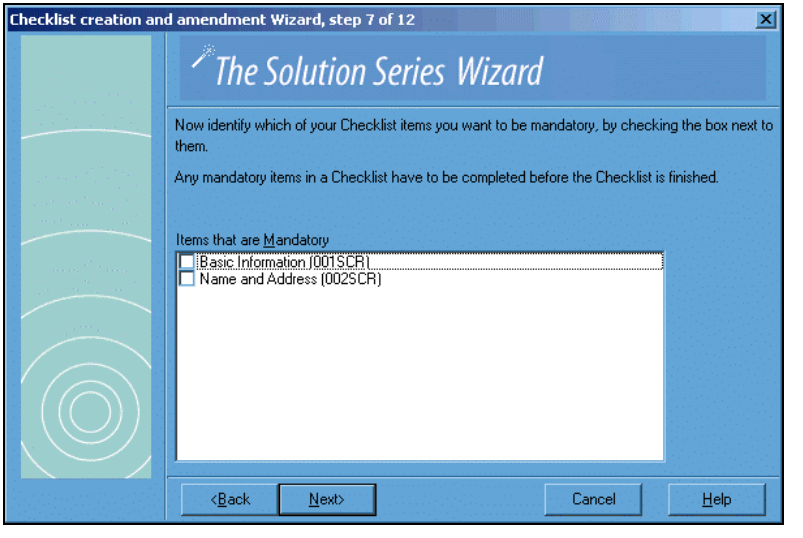
For practice, click Next.

Mandatory items (7 of 12)

16. Select Items that are Mandatory

Click the check box of any item that must be completed before the checklist can be successfully finished. A check mark indicates the item is mandatory.

For practice, do not select an item.



17. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Finish or request advanced features (8 of 12)

18. Select Advanced features

If you want to select advanced features which include identifying items that can not be re-entered and identifying items that are dependent on others, click the Advanced features check box.

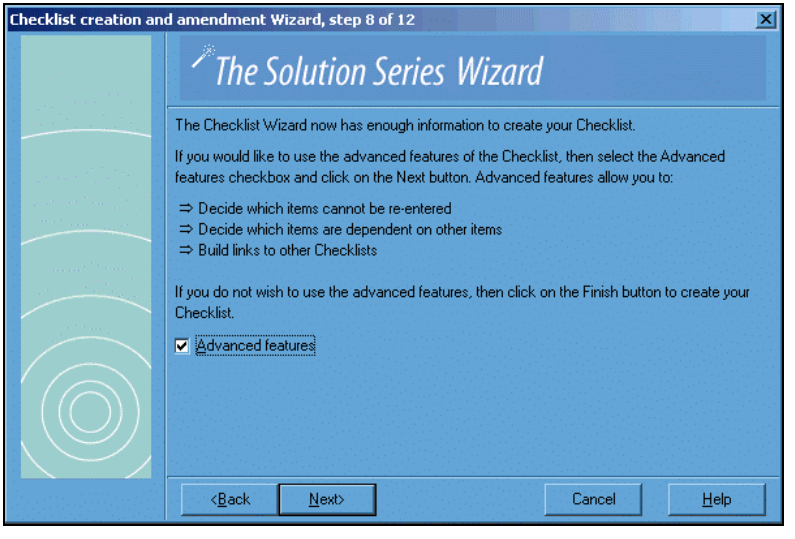
Note: Building links to other checklists are for universal checklists only.

If you do not want to select advanced features, continue with Step 24.

Note: When Advanced features is checked, the Finish button is replaced with a Next button.

For practice, select Advanced features.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



19. Click Next

Click Next to continue creating a checklist.

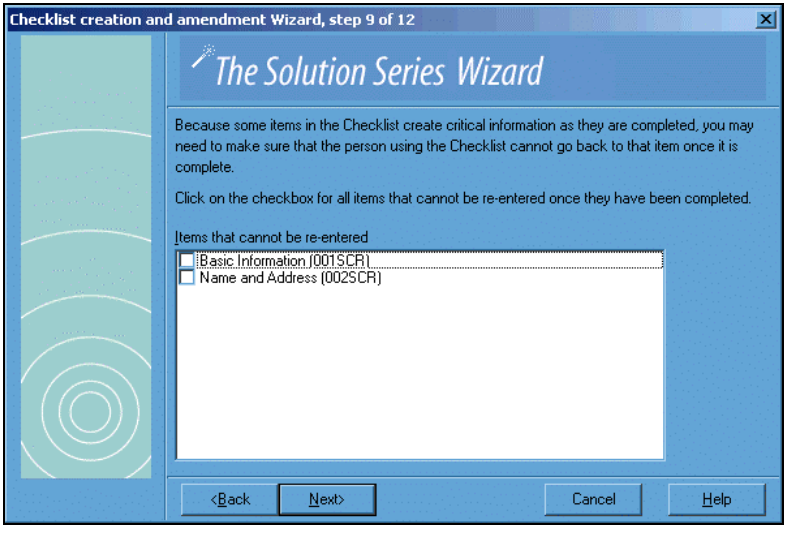
For practice, click Next.

Assign items that can not be re-entered (9 of 12)

20. Select Items that can not be re-entered

Click the check box of any item in the checklist that can not be re-entered. A check mark indicates the item can not be re-entered.

For practice, do not select an item.



21. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

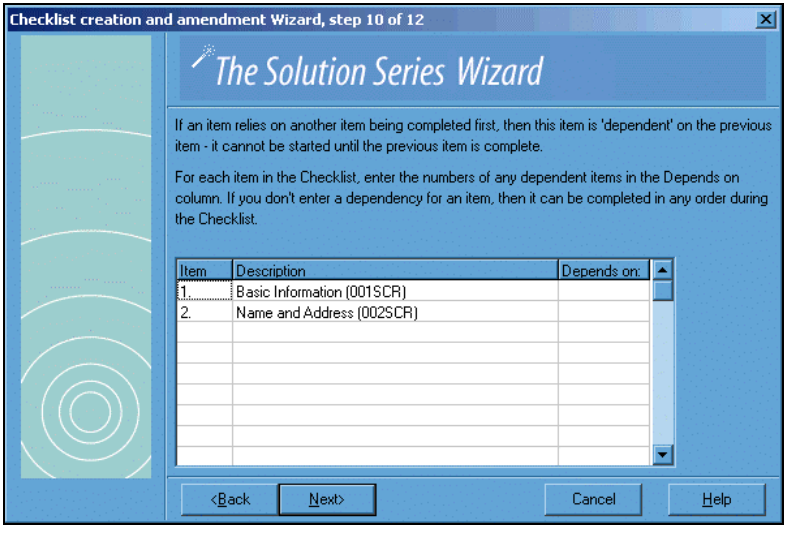
Assign dependencies (10 of 12)

22. Enter Depends on

If an item can not be performed until another has been completed, enter the item number on which this item is dependent in the Depends on text box. For example, if item 1 must be complete before item 3 is performed, you would enter '1' in the Depends on text box for item 3.

Repeat this step for any other item that depends on another.

For practice, leave these text boxes blank.

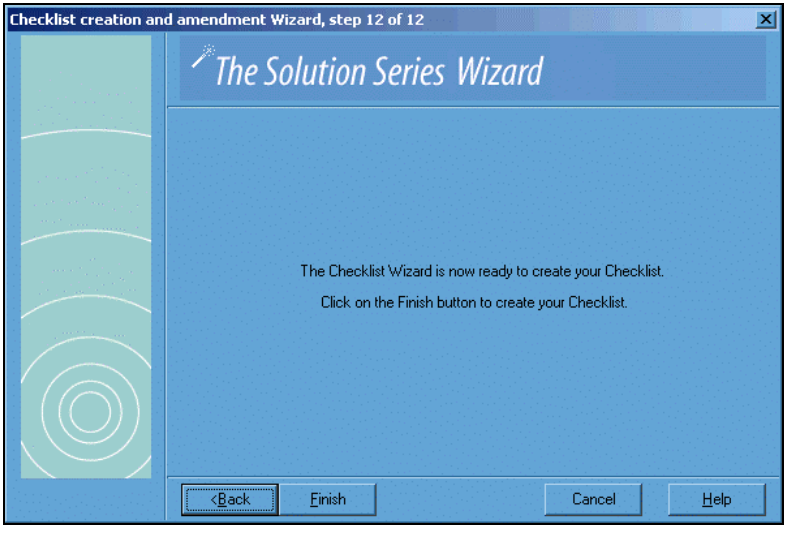


23. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

If you completed the guided practice, the resulting dialog should look similar to the example that follows:



Finish (12 of 12)

24. Click Finish

Click Finish to create the checklist.

The checklist is added to the Bookmarks menu and Favorites toolbar.

For practice, click Finish.

See also:

- The Checklist wizard ***(on page 58)***

For more information on creating personal checklists.

Creating a universal checklist

There are two types of checklists—personal and universal.

Note: To create a personal or universal checklist, you must have the proper authority. If you do not have the authority to create checklists, the system will direct you to see your Cyborg administrator to change your user profile.

To create a personal checklist, follow the steps in ***Creating a personal checklist*** (on page 71).

To create a universal checklist, follow these steps.

Note: To create a universal checklist, you will use the Checklist wizard. Depending on your user profile and the options that you select, the wizard may skip one or more steps.

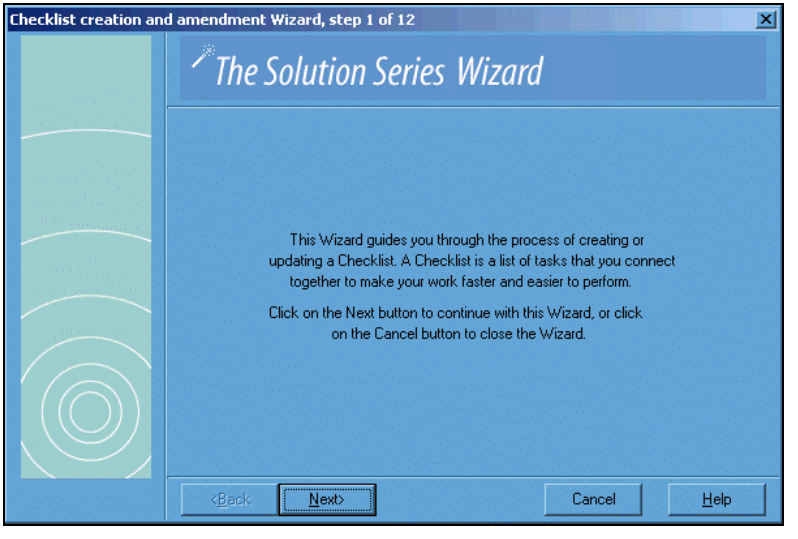
1. Access the Checklist creation and amendment Wizard

Access this wizard by making the following selections from the Navigator:

Component: User Tools
Process: User Tools
Task: Create/Modify a Checklist

For practice, access the Checklist creation and amendment Wizard.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



Welcome (1 of 12)

2. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

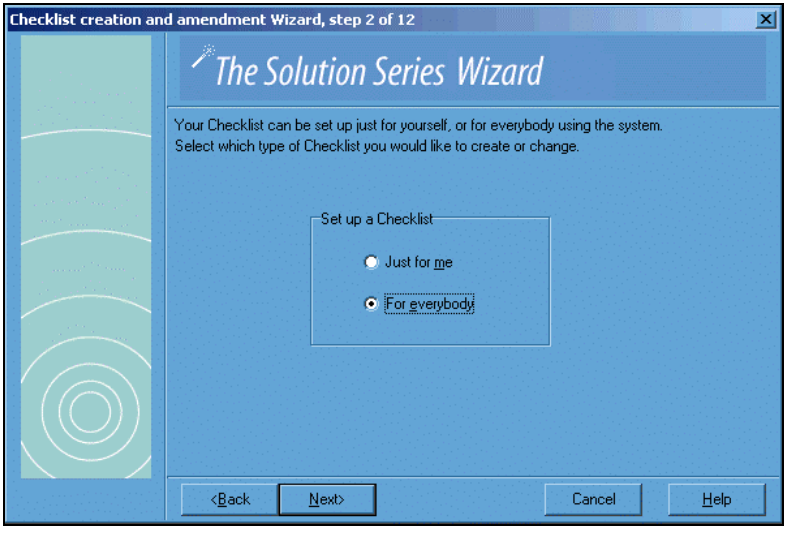
Checklist type (2 of 12)

3. Select 'For everybody'

Select 'For everybody' to create a universal checklist.

For practice, select For everybody.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



4. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Checklist name (3 of 12)

5. Position the pointer in the New Checklist text box

The insertion pointer displays in the New Checklist text box.

For practice, click in the New Checklist text box.

6. Enter the checklist name

Enter a name of up to 30 characters for the checklist.

For practice, type 'Test03'.

7. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Checklist items and sequence (4 of 12)

8. Drag an item to the Selected Items pane

Fully expand the tree view in the Available Items pane.

To add an item as part of your checklist, drag it from the Available Items pane to the Selected Items pane. To delete an item that you have added, drag the item from the Selected Items pane back to the Available Items pane.

The items in the Available items pane are the same as those displayed on your Navigator minus checklists and dialogs.

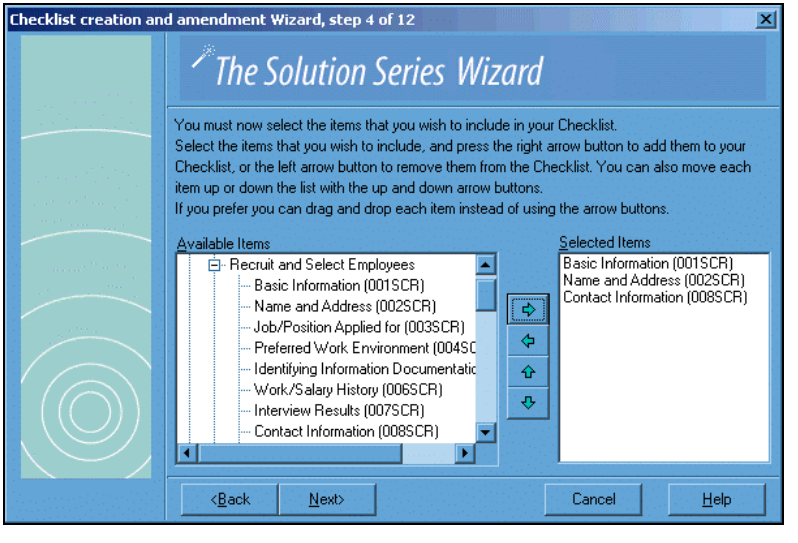
Note: *If you want to create a checklist that only presents links to other checklists, do not select any items. Continue with Step 9.*

The item is added to the Selected Items pane. Repeat this step to add more items to your checklist.

Note: *The order in which items are displayed in the Selected Items pane determines the order in which they appear when you execute the completed checklist. You can change the order by moving an item within the Selected Items pane.*

For practice, select the items you want in your checklist.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



9. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Same effective date and new hire checklist (5 of 12)

10. Select Use the same Effective date for each item

If you want the same effective date to be automatically applied to every item in the checklist, click this check box.

For practice, do not select this check box.

11. Select This is a new hire Checklist

If this is a new hire process, click this check box. This will invoke special processing when the checklist is executed.

For practice, do not select this check box.

12. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Item descriptions (6 of 12)

13. Select an item to change

If you want to change an item's description, select the item in the Current description pane. The description displays as a step name in the checklist and in a ToolTip for the next and previous buttons on the Selection toolbar when the item is the next or previous item in the checklist sequence.

The current description is displayed in the New description text box for you to edit.

For practice, do not select an item.

14. Enter a New description

Enter a new description of up to 40 characters.

Repeat Steps 13 and 14 to change any other description.

For practice, do not enter a new description.

15. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Mandatory items (7 of 12)

16. Select Items that are Mandatory

Click the check box of any item that must be completed before the checklist can be successfully finished. A check mark indicates the item is mandatory.

For practice, do not select an item.

17. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Finish or request advanced features (8 of 12)

18. Select Advanced features

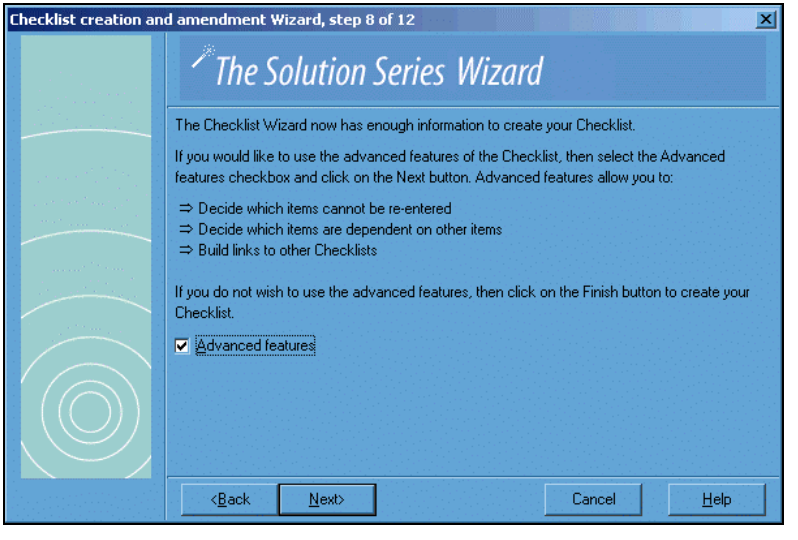
If you want to select advanced features which include identifying items that can not be re-entered, identifying items that are dependent on others, and building links to other checklists, click the Advanced features check box.

If you do not want to select advanced features, continue with Step 27.

Note: When Advanced features is checked, the Finish button is replaced with a Next button.

For practice, select Advance features.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



19. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Assign items that can not be re-entered (9 of 12)

20. Select Items that can not be re-entered

Click the check box of any item in the checklist that can not be re-entered. A check mark indicates the item can not be re-entered.

For practice, do not select an item.

21. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Assign dependencies (10 of 12)

22. Enter Depends on

If an item can not be performed until another has been completed, enter the item number on which this item is dependent in the Depends on text box. For example, if item 1 must be complete before Item 3 is performed, you would enter '1' in the Depends on text box for item 3.

For practice, leave these text boxes blank.

23. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Build links to other checklists (11 of 12)

24. Enter a Description

Enter a description of up to 40 characters. The description will be displayed as an option to link to another checklist when this checklist is executed.

For practice, do not enter a description.

25. Select a checklist

Select a checklist from the list box to link to after this checklist is executed.

Note: In order to build a link to another checklist, that checklist must already exist.

Repeat Steps 24 and 25 to build links to up to six checklists.

For practice, do not select a checklist.

26. Click Next

Click Next to continue creating a checklist.

For practice, click Next.

Finish (12 of 12)

27. Click Finish

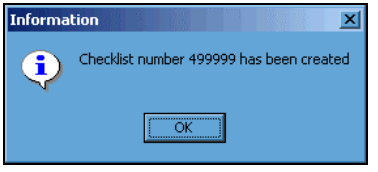
The checklist is created. The universal checklist can now be added to menus and the Navigator so users can access it.

An information dialog will display confirming that the checklist has been created.

For practice, click Finish.

28. Click OK

Click OK on the information dialog.



For practice, click OK.

See also:

- The Checklist wizard ***(on page 58)***

For more information on creating universal checklists.

Modifying a personal checklist

There are two types of checklists—personal and universal.

Note: To modify a personal or universal checklist, you must have the proper authority. If you do not have the authority to modify checklists, the system will direct you to see your Cyborg administrator to change your user profile.

To modify a universal checklist, follow the steps in ***Modifying a universal checklist*** (on page 95).

To modify a personal checklist, follow these steps.

To complete the Guided Practice in this task you must have completed the Guided Practice in the task ***Creating a personal checklist*** (on page 71).

Note: To modify a personal checklist, you will use the Checklist wizard. Depending on your user profile and the options that you select, the wizard may skip one or more steps.

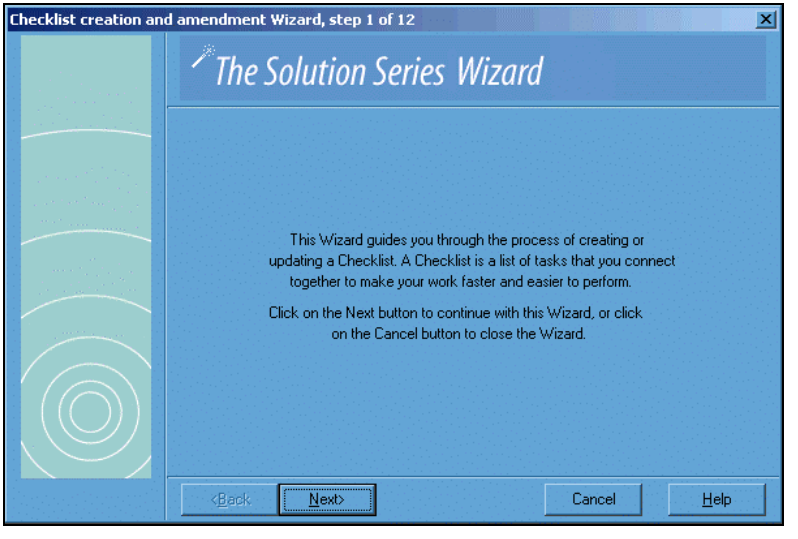
1. Access the Checklist creation and amendment Wizard

Access this wizard by making the following selections from the Navigator:

Component: User Tools
Process: User Tools
Task: Create/Modify a Checklist

For practice, access the Checklist creation and amendment Wizard.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



Welcome (1 of 12)

2. Click Next

Click Next to continue modifying a checklist.

For practice, click Next.

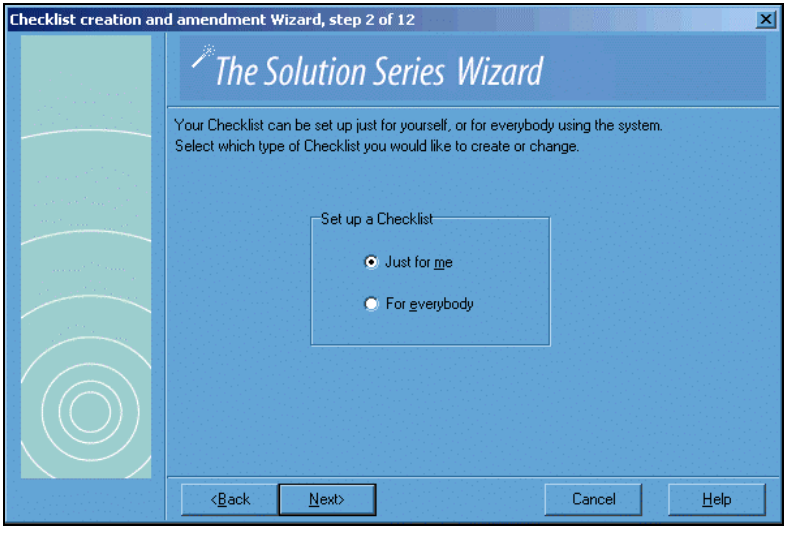
Checklist type (2 of 12)

3. Select 'Just for me'

Select 'Just for me' to modify a personal checklist.

For practice, select 'Just for me'.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



4. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Checklist name (3 of 12)

5. Select the checklist to be modified

The checklist is highlighted and the name is displayed in the Rename Checklist text box.

For practice, select 'Test02'.

6. Modify the checklist name

If you want to modify the name of the checklist, enter a name of up to 30 characters in the Rename Checklist text box.

For practice, do not modify the checklist name.

7. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Checklist items and sequence (4 of 12)

8. Drag an item to the Selected Items pane

Fully expand the tree view in the Available Items pane.

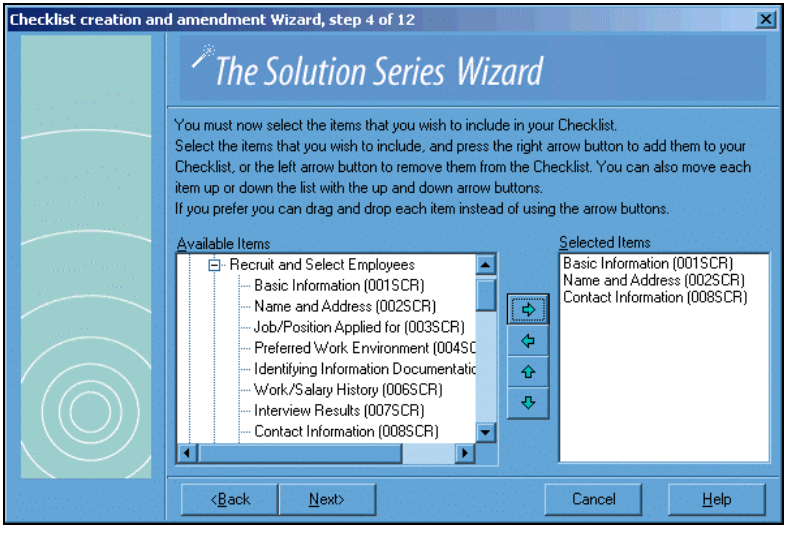
To add an item as part of your checklist, drag it from the Available Items pane to the Selected Items pane. To delete an item, drag the item from the Selected Items pane back to the Available Items pane.

The items in the Available items pane are the same as those displayed on your Navigator minus checklists and dialogs.

Note: *The order in which items are displayed in the Selected Items pane determines the order in which they appear when you execute the completed checklist. You can change the order by moving an item within the Selected Items pane. If you change the order or delete an item which has dependencies set, the system will display a warning message informing you that the dependencies will be lost if you continue with the change.*

For practice, expand Employee Resourcing, and then expand Recruit and Select Employees. Then select Contact Information.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



9. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Same effective date and new hire checklist (5 of 12)

10. Select Use the same Effective date for each item

If you want the same effective date to be automatically applied to every item in the checklist, click this check box. If you do not want the same effective date to be applied, clear the check box.

For practice, select this check box.

11. Select This is a new hire Checklist

If this is a new hire process, click this check box. This will invoke special processing when the checklist is executed.

For practice, do not select this check box.

12. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Item descriptions (6 of 12)

13. Select an item to change

If you want to change an item's description, select the item in the Current description pane. The description displays as a step name in the checklist and in a ToolTip for the next and previous buttons on the Selection toolbar when the item is the next or previous item in the checklist sequence.

The current description is displayed in the New description text box for you to edit.

For practice, do not select an item.

14. Enter a New description

Enter a new description of up to 40 characters.

Repeat Steps 13 and 14 to change any other description.

For practice, do not enter a description.

15. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Mandatory items (7 of 12)

16. Select Items that are Mandatory

Click the check box of any item that must be completed before the checklist can be successfully finished. A check mark indicates the item is mandatory.

For practice, do not select an item.

17. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Add to favorites and Advanced features (8 of 12)

18. Select Add to favorites

If you want to add the checklist to the Favorites toolbar, click the Add to **f**avorites check box.

Note: If the checklist is already on the Favorites toolbar and you click the Add to favorites check box, the checklist will be added again.

For practice, do not select this check box.

19. Select Advanced features

If you want to select advanced features which include identifying items that can not be re-entered and identifying items that are dependent on others, click the **A**dvanced features check box.

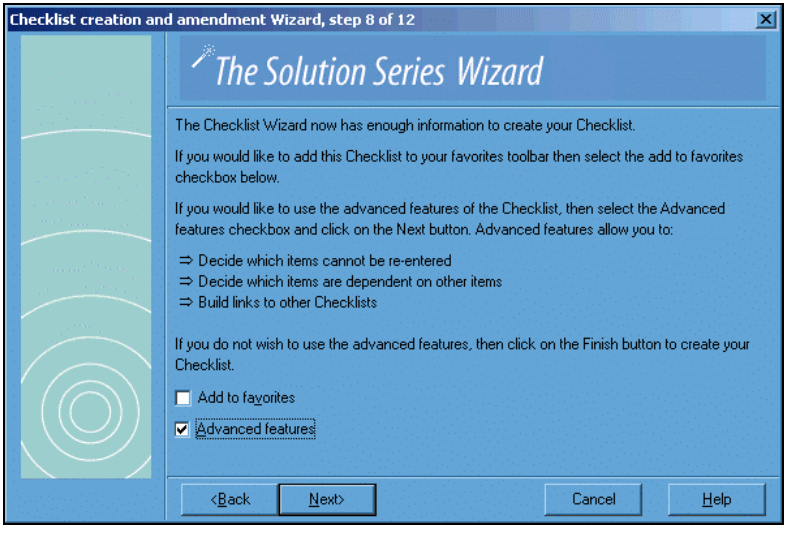
Note: Building links to other checklists are for universal checklists only.

If you do not want to select advanced features, continue with Step 25.

Note: When Advanced features is checked, the Finish button is replaced with a Next button.

For practice, select Advance features.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



20. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Assign items that can not be re-entered (9 of 12)

21. Select Items that can not be re-entered

A check mark indicates the item can not be re-entered. Click the check box of any item in the checklist that can not be re-entered. Clear the check box of any item that can be re-entered.

For practice, do not select an item.

22. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Assign dependencies (10 of 12)

23. Enter Depends on

If an item can not be performed until another has been completed, enter the item number on which this item is dependent in the Depends on text box. For example, if item 1 must be complete before item 3 is performed, you would enter '1' in the Depends on text box for item 3.

Repeat this step for any other item that depends on another.

For practice, leave these text boxes blank.

24. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Finish (12 of 12)

25. Click Finish

Click Finish to save your modifications.

For practice, click Finish.

See also:

- Checklist modification ***(on page 67)***

For more information on maintaining checklists.

Modifying a universal checklist

There are two types of checklists—personal and universal.

Note: To modify a personal or universal checklist, you must have the proper authority. If you do not have the authority to modify checklists, the system will direct you to see your Cyborg administrator to change your user profile.

To modify a personal checklist, follow the steps in ***Modifying a personal checklist*** (on page 89).

To modify a universal checklist, follow these steps.

To complete the Guided Practice in this task, you must have completed the Guided Practice in the task ***Creating a universal checklist*** (on page 82).

Note: To modify a universal checklist, you will use the Checklist wizard. Depending on your user profile and the options that you select, the wizard may skip one or more steps.

1. Access the Checklist creation and amendment Wizard

Access this wizard by making the following selections from the Navigator:

Component: User Tools
Process: User Tools
Task: Create/Modify a Checklist

For practice, access the Checklist creation and amendment Wizard.

Welcome (1 of 12)

2. Click Next

Click Next to continue modifying a checklist.

For practice, click Next.

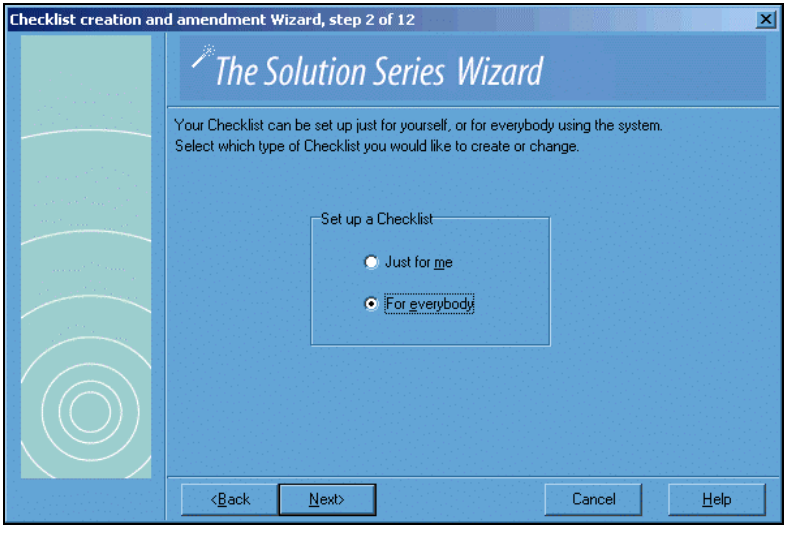
Checklist type (2 of 12)

3. Select 'For everybody'

Select 'For everybody' to modify a universal checklist.

For practice, click 'For everybody'.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



4. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Checklist name (3 of 12)

5. Select the checklist to be modified

The checklist is highlighted and the name is displayed in the Rename Checklist text box.

For practice, 'Test03'.

6. Modify the checklist name

If you want to modify the name of the checklist, enter a name of up to 30 characters in the Rename Checklist text box.

For practice, do not modify the checklist name.

7. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Checklist items and sequence (4 of 12)

8. Drag an item to the Selected Items pane

Fully expand the tree view in the Available Items pane.

To add an item as part of your checklist, drag it from the Available Items pane to the Selected Items pane. To delete an item that you have added, drag the item from the Selected Items pane back to the Available Items pane.

The items in the Available items pane are the same as those displayed on your Navigator minus checklists and dialogs.

Note: The order in which items are displayed in the Selected Items pane determines the order in which they appear when you execute the completed checklist. You can change the order by moving an item within the Selected Items pane.

For practice, add another item to the checklist.

9. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Same effective date and new hire checklist (5 of 12)

10. Select Use the same Effective date for each item

If you want the same effective date to be automatically applied to every item in the checklist, click this check box. If you do not want the same effective date, clear this check box.

For practice, select this check box.

11. Select This is a new hire Checklist

If this is a new hire process, click this check box. This will invoke special processing when the checklist is executed.

For practice, do not select this check box.

12. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Item descriptions (6 of 12)

13. Select an item to change

If you want to change an item's description, select the item in the Current description pane. The description displays as a step name in the checklist and in a ToolTip for the next and previous buttons on the Selection toolbar when the item is the next or previous item in the checklist sequence.

The current description is displayed in the New description text box for you to edit.

For practice, do not select an item.

14. Enter a New description

Enter a new description of up to 40 characters.

Repeat Steps 13 and 14 to change any other description.

For practice, do not enter a description.

15. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Mandatory items (7 of 12)

16. Select Items that are Mandatory

Click the check box of any item that must be completed before the checklist can be successfully finished. A check mark indicates the item is mandatory.

For practice, do not select an item.

17. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Finish or request advanced features (8 of 12)

18. Select Advanced features

If you want to select advanced features which include identifying items that can not be re-entered, identifying items that are dependent on others, and building links to other checklists, click the Advanced features check box.

If you do not want to select advanced features, continue with Step 27.

Note: When Advanced features is checked, the Finish button is replaced with a Next button.

For practice, select Advance features.

19. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Assign items that can not be re-entered (9 of 12)

20. Select Items that can not be re-entered

Click the check box of any item in the checklist that can not be re-entered. A check mark indicates the item can not be re-entered.

For practice, do not select an item.

21. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Assign dependencies (10 of 12)

22. Enter Depends on

If an item can not be performed until another has been completed, enter the item number on which this item is dependent in the Depends on text box. For example, if item 1 must be complete before item 3 is performed, you would enter '1' in the Depends on text box for item 3.

For practice, leave these text boxes blank.

23. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

Build links to other checklists (11 of 12)

24. Enter a Description

Enter a description of up to 40 characters. The description will be displayed as an option to link to another checklist when this checklist is executed.

For practice, do not enter a description.

25. Select a checklist

Select a checklist from the list box to link to after this checklist is executed.

Note: In order to build a link to another checklist, that checklist must already exist.

Repeat Steps 24 and 25 to build links to up to six checklists.

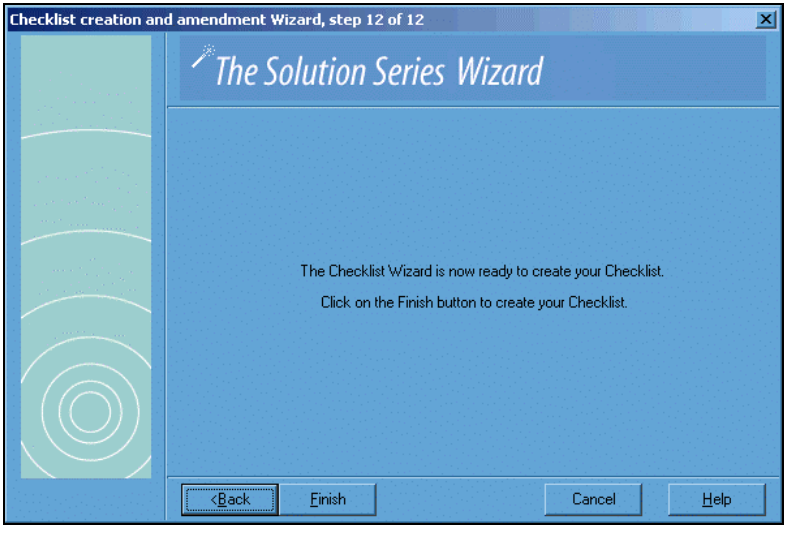
For practice, do not select a checklist.

26. Click Next

Click Next to continue modifying the checklist.

For practice, click Next.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



Finish (12 of 12)

27. Click Finish

The checklist is modified.

For practice, click Finish.

See also:

- Checklist modification ***(on page 67)***

For more information on maintaining checklists.

Removing a personal checklist

To remove a universal checklist, follow the steps in ***Removing a universal checklist*** (on page 102).

To complete the Guided Practice in this task you must have completed the Guided Practice in the task ***Creating a personal checklist*** (on page 71).

To remove a personal checklist, complete the following steps:

1. Access Remove a Checklist dialog box

Access this dialog box by making the following selections from the Navigator:

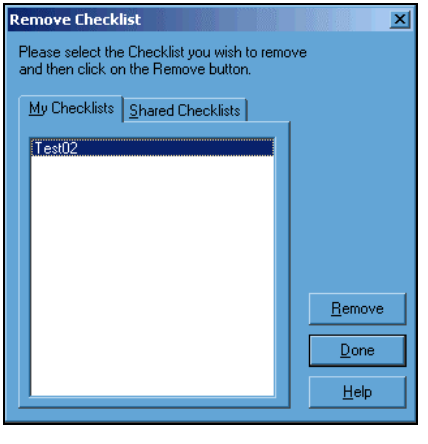
Component: User Tools
Process: User Tools
Task: Remove a Checklist

For practice, access Remove a Checklist dialog box.

2. Select the checklist

Select the checklist to be removed. The checklist is highlighted and the Remove button is enabled.

For practice, select the Test02 checklist.



3. Click Remove

The checklist is removed from the Remove Checklist dialog box.

Repeat Steps 2 and 3 to remove other checklists.

For practice, click Remove.

4. Click Done

The Remove Checklist dialog box is closed.

Note: The checklist is not automatically removed from the Bookmarks menu or Favorites toolbar. You must remove it manually.

For practice, click Done.

See also:

- Checklist removal ***(on page 67)***

For more information on removing checklists.

- Deleting a menu item ***(on page 130)***

For detailed directions on removing a checklist from a menu.

Removing a universal checklist

To remove a personal checklist, follow the steps in ***Removing a personal checklist*** (on page 101).

To complete the Guided Practice in this task, you must have completed the Guided Practice in the task ***Creating a universal checklist*** (on page 82).

To remove a universal checklist, complete the following steps:

1. Access Remove Checklist dialog box

Access this dialog box by making the following selections from the Navigator:

Component: User Tools
Process: User Tools
Task: Remove a Checklist

For practice, access Remove Checklist dialog box.

2. Click Shared Checklists

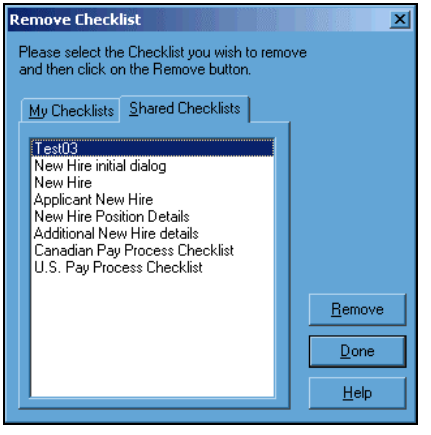
Click the Shared Checklists tab. Universal checklists are displayed.

For practice, click Shared Checklists.

3. Select the checklist

Select the checklist to be removed. The checklist is highlighted and the Remove button is enabled.

For practice, select the Test03 checklist.



4. Click Remove

The checklist is removed from the Remove Checklist dialog box.

Repeat Steps 3 and 4 to remove other universal checklists.

For practice, click Remove.

5. Click Done

The Remove Checklist dialog box is closed.

For practice, click Done.

See also:

- Checklist removal ***(on page 67)***

For more information on removing checklists.

- Deleting a menu item ***(on page 130)***

For detailed directions on removing a checklist from a menu.

Review of Questions Answered

1. What is a checklist?

2. What are the differences between a personal checklist and a universal checklist?

3. What tool do you use to create a checklist?

4. What tool do you use to delete a checklist?

5. What tool do you use to control checklists?

CHAPTER 5

Maintaining Menus

In This Chapter

Introduction

Maintaining menus provides another way to customize the system to meet the needs of your organization. Using the Menu Editor, you can edit any of the delivered application menus to show only those items you will use, change the order of items, or replace items.

Tasks

This section explains the following:

- Adding a menu item
- Defining a shortcut key for a menu item
- Changing the order of menu items
- Modifying a menu item
- Deleting a menu item
- Adding a report group to the menu

Prerequisites

Before you can maintain menus, you must be logged on to The Solution Series and have the authority to maintain menus.

Questions answered

The following questions are answered in this section:

1. What types of menus are delivered with the system?
2. What is the relationship between the menu structure and the Navigator?
3. What is the Menu Editor and how is it used?

Menus

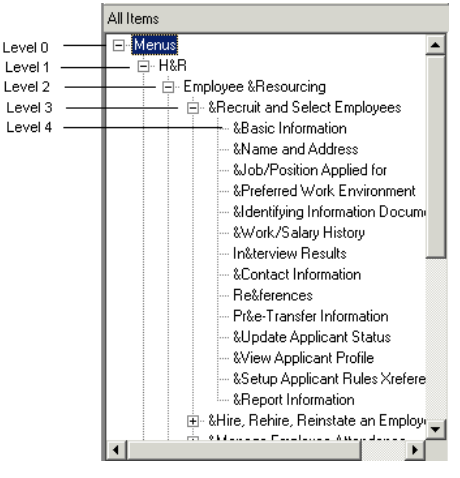
The delivered menu bar contains two types of menus—function menus and application menus:

- Function menus (File, Edit, View, Bookmarks, Actions, Go, and Help)
- Application menus (HR, Benefits, Payroll, TA (Time and Attendance), and Tools)

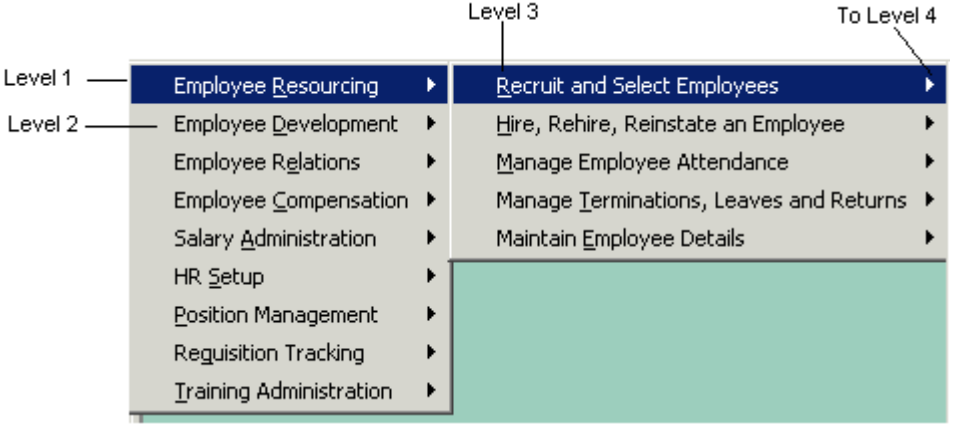
Application menus provide access to the business components of the administrative solutions and to its tools and utilities. You can edit only the application menus. You can not edit the function menus. Changes made to menus are available to all users.

Menu levels

Menus and submenus are assigned level numbers that correspond to their level in the menu hierarchy. The following figure illustrates menu levels:

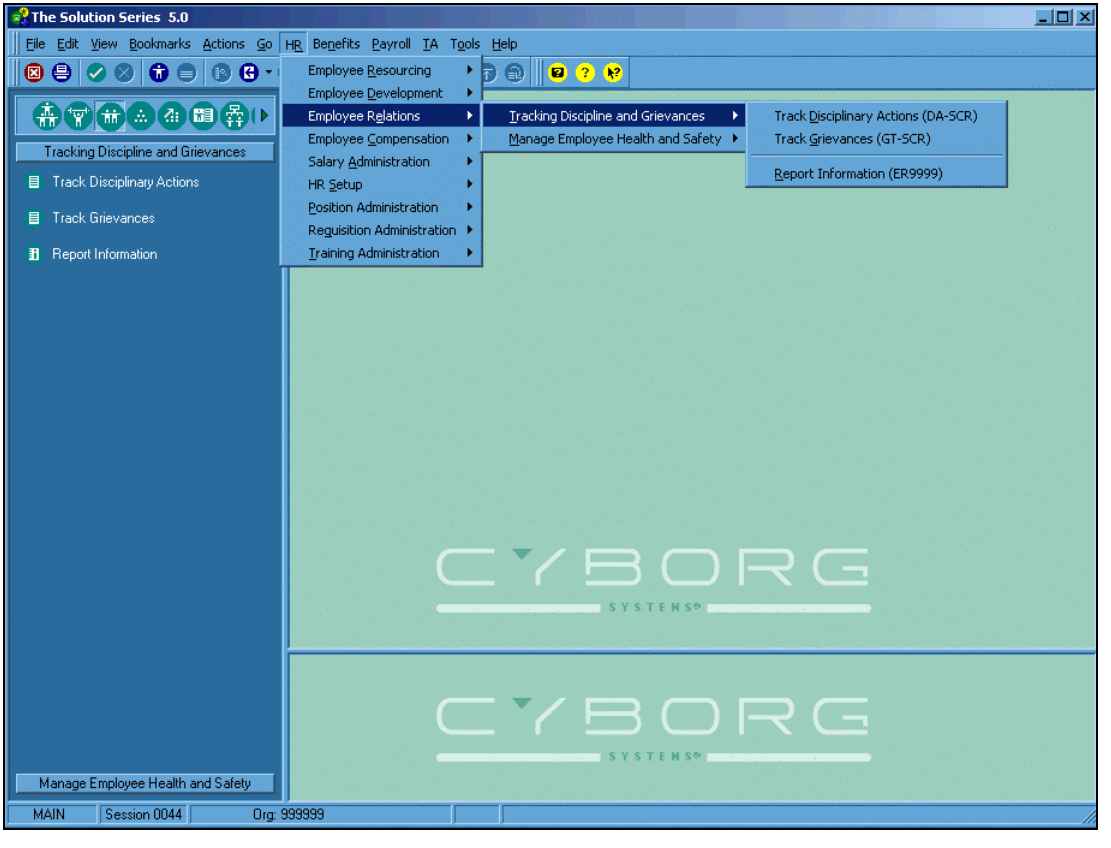


- Menu level-0, Menus, defines a starting point for the menus. It is not displayed on the Work Area, and it can not be deleted.
- Menu level-1 is the item displayed on the menu bar. This is an application.
- Menu level-2 represents the first submenu. This is a component of an application.
- Menu level-3 represents the second submenu. This is a process.
- Menu level-4 represents the third (last) submenu. This level links you to forms, checklists, and dialogs. You can not define a menu beyond level 4.


Level 3
To Level 4
Level 1
Level 2
Employee Resourcing
Employee Development
Employee Relations
Employee Compensation
Salary Administration
HR Setup
Position Management
Requisition Tracking
Training Administration
Recruit and Select Employees
Hire, Rehire, Reinstate an Employee
Manage Employee Attendance
Manage Terminations, Leaves and Returns
Maintain Employee Details

Relationship of the menu structure and the Navigator

The menu structure is mirrored in the Navigator. Menu levels two through four are shown in the Navigator. The following figure shows both the HR menu structure for accessing the Tracking Discipline and Grievances tasks and the corresponding Navigator access path. As you can see, Employee Relations (level two), Tracking Discipline and Grievances (level three), and Track Disciplinary Actions, Track Grievances, and Report Information (level four), are duplicated in the Navigator.



Because of this relationship between the menus and the Navigator, any changes made to the menus are automatically reflected in the Navigator. There is no additional work required.

Apply the Concept
Based on your understanding of the menu structure as explained in this concept, which level of the menu would you need to modify if you were adding a new form to the menu structure?

Apply the Concept
Would you also need to modify the Navigator to include the new form?

Menu Editor

The Menu Editor is used to add, modify, and delete menu items. You can edit the delivered application menus and add your own menus. The Menu Editor is accessed from the Development Tools component and the System Control Repository Utilities process.

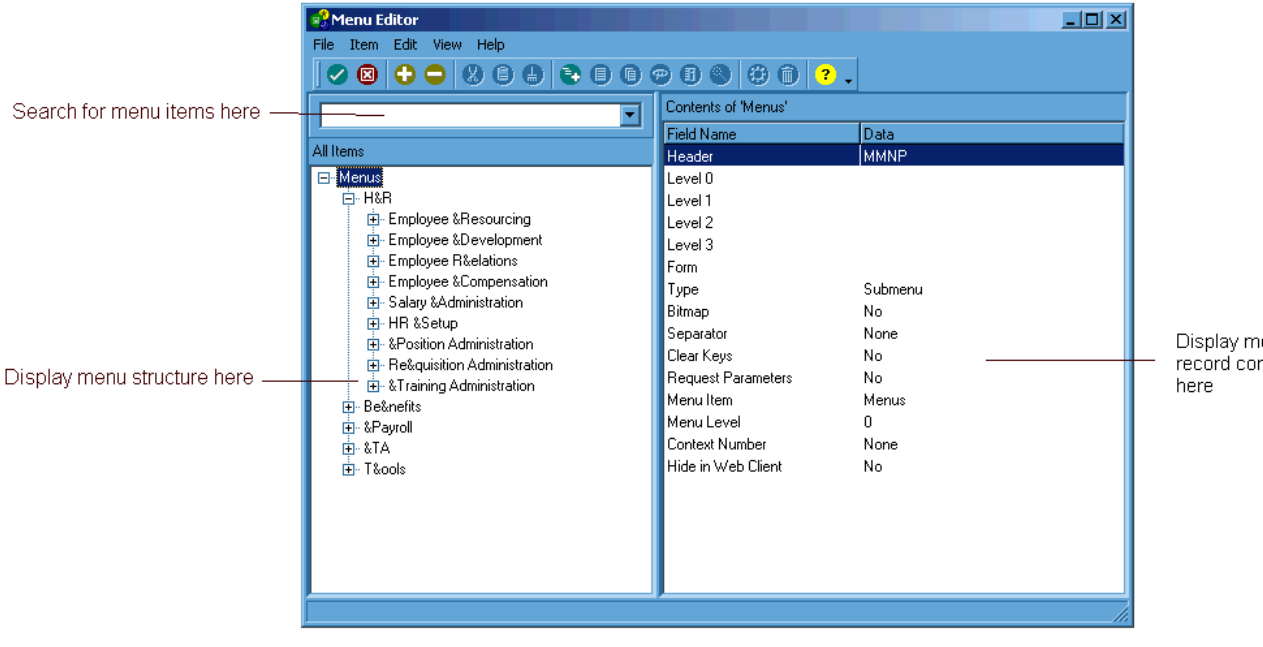
In addition to adding forms and checklists, you can use the Menu Editor to add your report groups to the menu. This will allow you to launch the report groups from the Navigator or menu. Report groups that are to be launched from the menus must have names that end in 'RG'.

☞ *Refer to the Using The Solution Series: Administrative Solutions documentation for more information about report groups.*

See also:

■ ***Adding a report group to the menu***
For detailed instructions for adding a report group to the menu.

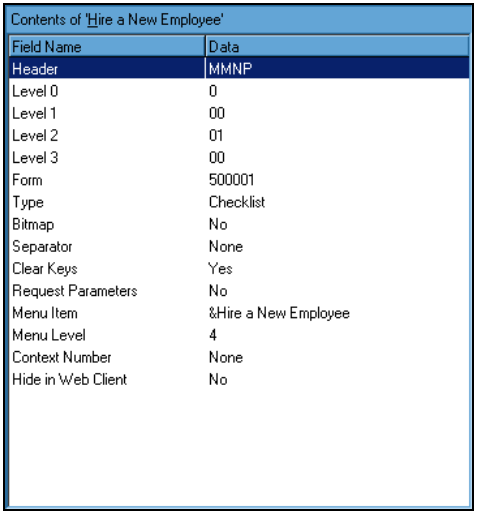
The Menu Editor contains a toolbar for initiating actions, a drop-down list for searching for menu items, and two panes for displaying menu information.



The left pane, titled 'All Items', shows a 'tree view' of the existing menu structure. You use the left pane for working. For example, you use the tree view to indicate what level of information you want to see, to select items to add to or modify, and to select items for which you want to view detail in the right pane.

The right pane, titled 'Contents of xxx', shows the detail of the menu record for the selected menu item. Using this display, you can verify the definition of a menu item.

If the selected item was the New Hire checklist, the right pane would look like this:



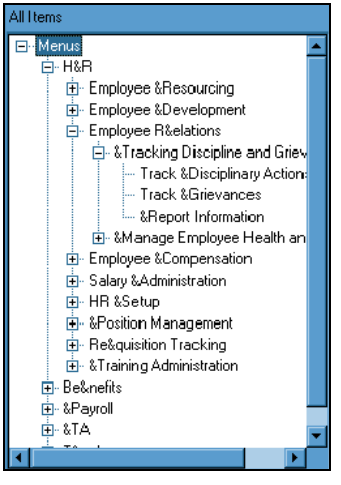
The information displayed in the left pane is explained in the following table:

Field Name	**Data**
Header	Will always be MMNP
Level 0–Level 3	The level in which the item resides
Form	Form name; only applies to level 4
Type	Item type
Bitmap	Image name
Separator	Indicates if the item has a separator
Clear Keys	Indicates if the key and additional key information is cleared before the form is displayed
Request Parameters	Indicates if parameters are requested before the form is displayed
Menu Item	The name of the menu item
Menu Level	Level of the item (0–4)
Context Number	Help topic ID
Hide in Web Client	Indicates if this option is visible in the Web Client

The information in the right pane is for display only; you can not enter or modify information in the right pane.

Navigation in the left pane

If you are familiar with using the Windows Explorer, navigating through the left pane will be familiar to you. If a menu item has items below it that are not displayed, it will have a '+' next to it. When a menu item is expanded, its '+' sign is changed to a '-'. In the following figure, items such as 'Menus' and 'H&R' have been expanded. Items such as 'Employee &Resourcing' and 'Employee &Development' contain sub-items that are not displayed. In other words, they are 'collapsed'.



The following navigation choices are available:

- Expand and collapse item displays
- Search for menu items

Expand and collapse item displays

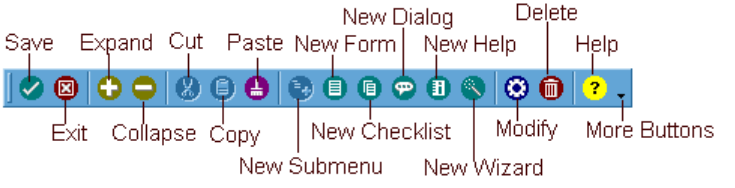
- To expand a particular item, click the '+' sign next to the item.
- To collapse a particular item and its sub-items, click the '-' sign next to the parent item.
- To expand all items, click the Expand button in the toolbar.
- To collapse all items, click the Collapse button in the toolbar.

Search for menu items

To quickly display information about a menu item, select it from the drop-down list box, located just above the left pane. This drop-down list contains only level-two menu items.

Menu Editor toolbar

The Menu Editor toolbar contains the controls you use to initiate actions. To initiate an action, click a toolbar button. The following figure shows the actions you can take:



The 'new' options available depend on the level to which you are adding an item. If you are working at levels one and two, only the New Submenu button will be active. If you are working at level three, all of the buttons, excluding New Submenu, will be active. No buttons will be active at level four. You can not add an item below this level.

New items

To add a new item, you click the 'parent' item, then select the button for the type of item being added. You can add the following types of items to the menus:

- Universal checklists
- Forms
- Help
- Submenus
- Wizards
- Dialogs

All types of menu items are added using the Add 'item' dialog.

Note: *New menu items must have all four levels before they will appear on the menu or Navigator.*

Options for forms

When adding a form item to a menu, you can set options to:

- Clear keys—clear the key and additional key text boxes before displaying the form.
- Request parameters—display a form requesting parameters to be entered before displaying the details on the form. The record key is created from the parameters and used to display the appropriate information.

By default, options are set to 'Neither'.

Separator lines

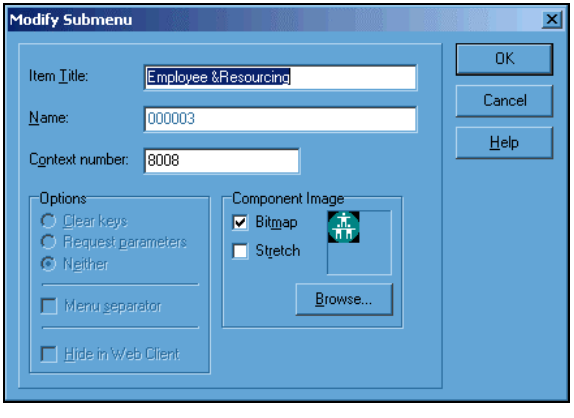
To visually mark a logical group of menu items, use a separator line. This figure shows a separator line used to group tasks and report information.

Component images

If you are adding a level-two menu—a component in the Navigator—you have the option of showing a bitmap for the component in the Navigator and having the bitmap stretched to fit the square in which it is displayed.

When using a bitmap image to represent the component, the Item Title will be used as the ToolTip. If you do not assign a bitmap image to a component, a default image will be used.

This figure shows the Modify Submenu dialog box for the 'Employee &Resourcing' component. This component uses the bitmap displayed:



Note: *If you assign a bitmap to a menu item and do not select the Hide in Web Client option, the image shown against the new component in the Web Client will be the default one:*

If you would like to have the images showing as the same in both clients, you would need to save your chosen bitmap image as a CompuServe Graphics Interchange (.gif) format, with the transparency set as appropriate, then copy that new graphic file to your webserver.*

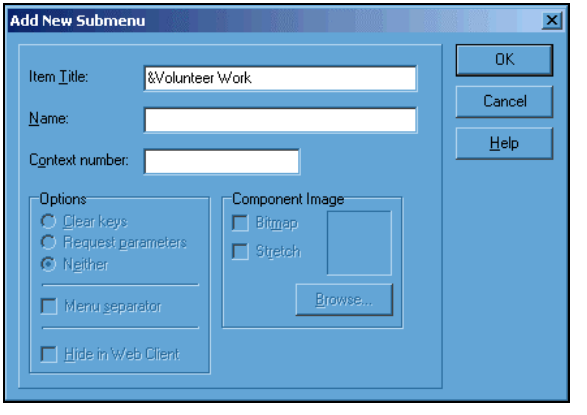
Help for components

When you add a component menu item, you have the option of displaying 'What's This?' help for the component. If your organization wants to assign help to an item and connect the component to the help topic, then you must enter the help topic ID in the Context number text box.

Example

Suppose you wanted to add a new submenu (level 3) under Employee Development (level 2) to track employee volunteer work. You would like to call the item 'Volunteer Work' and

you would like the shortcut key to be the 'V' in Volunteer. The Add New Submenu dialog could look like this:



See also:

- Adding a menu item ***(on page 121)***

For detailed instructions for adding a menu item.

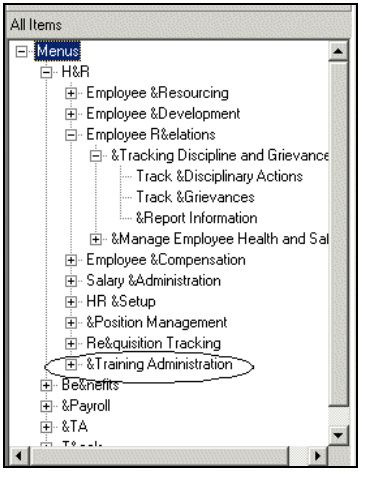
☞ *Refer to* **Shortcut keys and menu items** *(on page 117) for more information on shortcut keys.*

Order of menu items

You can easily change the order of menu items by dragging them to new locations. When you move a menu item to a new location, any submenu items are also moved.

You can only drag items to the same level in the menu structure. Refer to the following figure. You could move '&Training Administration' anywhere along the vertical line on which it resides.

For example, you might move it just below 'Salary &Administration'. However, you can not move it to a lower or higher level in the menu structure.



See also:

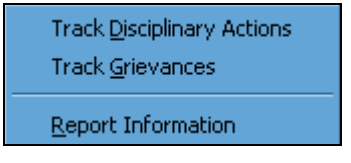
- Changing the order of menu items ***(on page 127)***

For detailed instructions for changing the order of menu items.

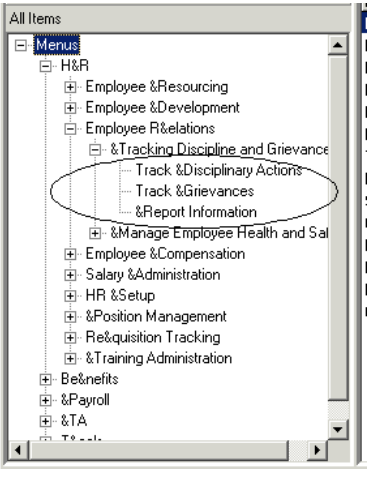
Shortcut keys and menu items

Shortcut keys provide an alternate method for accessing commands. Each delivered menu item has an underlined letter that indicates the keyboard shortcut key for choosing the menu item. Using the Menu Editor, you can define your own shortcut keys for event menu items. The shortcut keys you define will be used in combination with the ALT key.

To define a shortcut key for a menu item, you type an ampersand (&) before the letter to be used as part of the shortcut key combination. In this figure, you can see that the shortcut keys are the D in Disciplinary, the G in Grievances, and the R in Report:



In the Menu Editor, the definitions for these menu items look like this:



Note: The system does not check for duplicate shortcut keys; you need to manually track the assignment of shortcut keys.

See also:

- Defining a shortcut key for a menu item ***(on page 126)***

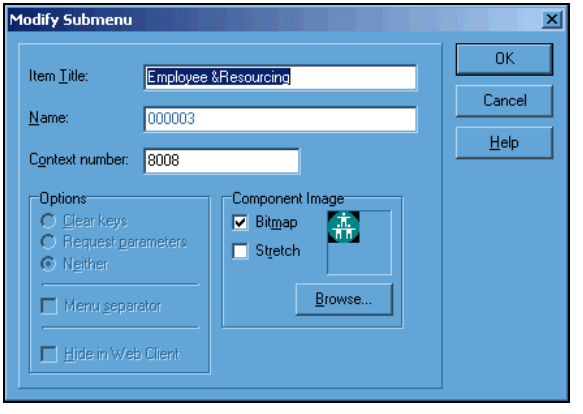
For detailed instructions for creating shortcut keys.

Apply the Concept

Based on your understanding of shortcut keys as they are used in the menu structure, what letter would be defined as a shortcut key in the item 'Re&quisition Tracking'?

Menu item changes

Changing a menu item is similar to adding one. Access the Menu Editor, select the item to modify, and click the Modify button on the toolbar. If you select the menu item 'Employee &Resourcing' to edit, the Modify Submenu dialog box will look like this:



Notice that even though 'Employee &Resourcing' is a level-two menu, the Name text box contains a value. All non-form items are automatically assigned a number that reflects their position in the menu hierarchy. In this example, 'Employee &Resourcing' is the third item below the zero level item, Menus.

See also:

- Modifying a menu item ***(on page 129)***

For detailed instructions for modifying a menu item.

Menu item deletion

You can delete any menu item, excluding level-0. To delete an item, you select it, and then click the Delete button on the toolbar. All dependent menu items will also be deleted.

See also:

- Deleting a menu item ***(on page 130)***

For detailed instructions for deleting a menu item.

Result of menu maintenance

When you finish editing a menu, both the System Control Repository and the Client Data File on your workstation are updated immediately. Other users will see the menu changes the next time they sign on to the system.

If for any reason the system is disabled during the editing of the menu records, a locked flag can be left on the MMN header record. The locked flag is a safety feature that prevents any other user from accessing the record. To manually unlock the records under these circumstances, the Unlock Menu Records utility (FIXMMN) must be used to reset the flag. You can access the Unlock Menu Records utility (FIXMMN) through the Unlock Menu Records task within the System Control Repository Utilities process of the Development Tools component on the Navigator.

Menu items and the Web Client

You have the option to prevent an item from being displayed in the Web Client interface of eCyborg. You would want to do this if, for example, it is not possible to perform the action from a web browser (if the process requires any action on the user's PC, for instance), or if you consider the task inappropriate for Web Client access.

To prevent an item from displaying in the Web Client you would select the Hide in Web Client option.

Menu items and user profiles

Access to level-two menu components, can be restricted through user profiles. By selecting the components with which a user can work, you can determine the components that will show in the Navigator and appear in the menus.

Apply the Concept
Based on your understanding of menu maintenance as explained in this concept, when would you expect to see the changes you have made to a menu structure?

Design Tips

When creating or maintaining menus, consider the following guidelines. We recommend these guidelines for usability and consistency:

- Group items in a way to minimize the number of clicks needed to get to another task.
- Always consider the business process and structure tasks logically for it.
- Place the most frequently used process at the bottom of the list. Because the Navigator displays the tasks for the last process in the list, placing the most frequently used process at the bottom will help the user.
- Try to keep the number of items on a process or task list under nine. More than nine may make the process or task appear cumbersome to the user. For example, if you have 12 tasks, you may consider creating two processes to make the grouping more manageable.
- Avoid creating a list of processes or tasks that requires scrolling. For example, on a 800 x 600 resolution screen, with five process bars, you can have 14 tasks.
- If used, place a report information task at the bottom of the list for consistency.
- Avoid using abbreviations.
- Any task that calls a dialog that requires additional information to proceed should be followed with an ellipsis (…), which you must enter manually.

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Completing the Guided Practice

If for any reason the system is disabled during the editing of the menu records, a locked flag can be left on the MMN header record. The locked flag is a safety feature that prevents any other user from accessing the record. To manually unlock the records under these circumstances, run the Unlock Menu Records utility (FIXMMN) to reset the flag.

Access this utility by making the following selections from the Navigator:

Component: Development Tools
Process: System Control Repository Utilities
Task: Unlock Menu Records

Adding a menu item

To add a menu item, follow these steps

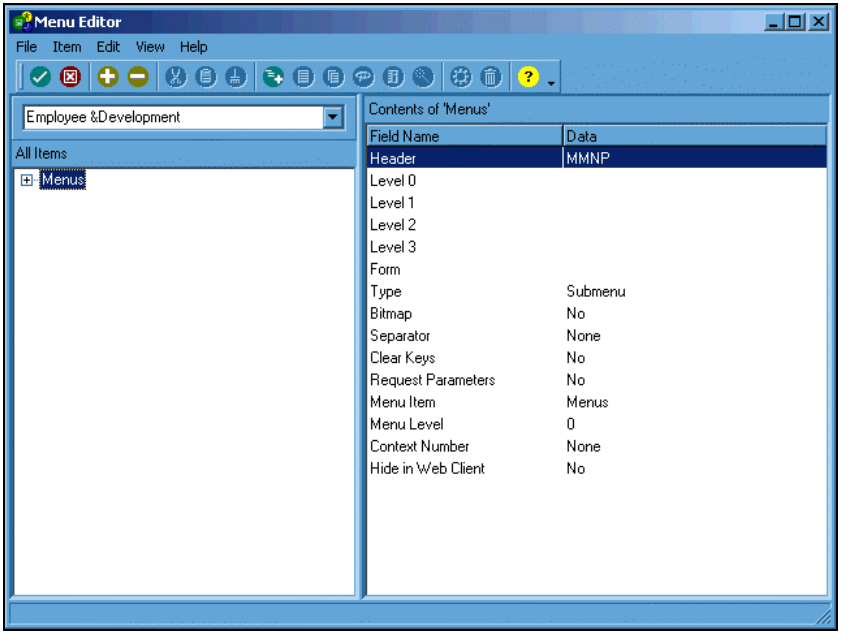
1. Access the Menu Editor

Access this dialog by making the following selections from the Navigator:

Component: Development Tools
Process: System Control Repository Utilities
Task: Customize Menus

For practice, access the Menu Editor.

If you completed the Guided Practice, the dialog that is displayed should look similar to the example that follows:



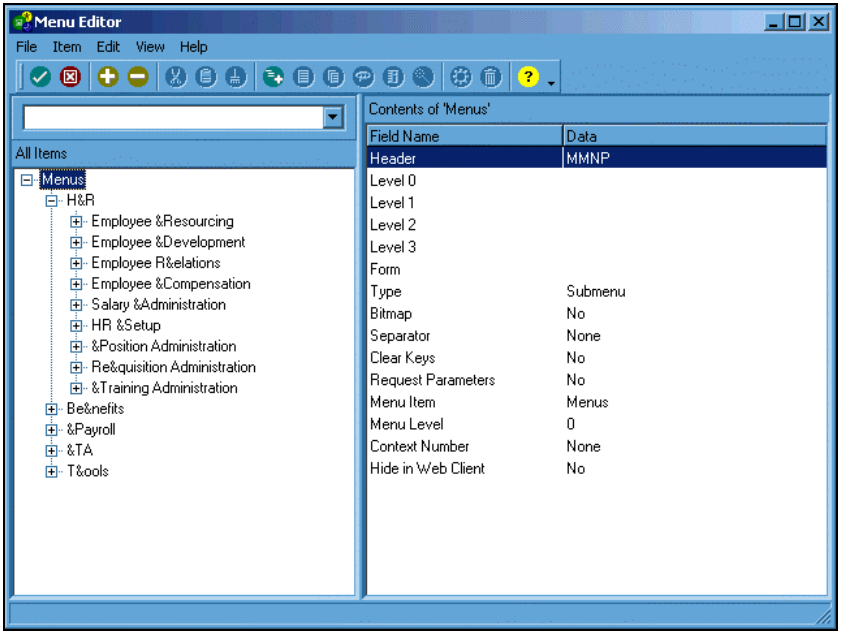
2. Select the parent item to receive the new item

Click the parent item in the tree view in the left pane.

If the item is not displayed, use the expand function or the menu search function.

For practice, expand the 'Menus' item and then expand the 'H&R' parent item.

If you completed the Guided Practice, the dialog that is displayed should look similar to the example that follows:



3. Select the type of item to add

Click the appropriate button on the toolbar. The Add dialog box appears.

For practice, click the New Submenu button.

4. Enter the Item Title

Type the name that should appear on the menu. This name can be up to 38 alphanumeric characters.

For practice, type 'Test Menu'.

5. Enter the Name

Type the name of the task. This option is only available for level-four items (tasks).

For practice, make no entry because this menu is not a level-four item.

6. Enter the Context number (optional)

Type the four-position context number for the help topic. Values must be numeric and within the range 8000–8999.

This option is only available for components.

For practice, leave this text box blank.

7. Select Options

If you are adding a form item, these options will be active. By default, 'Neither' is selected.

- Choose 'Clear Keys' if you want the key and additional key information to be cleared before the form is displayed.
- Choose 'Request parameters' if you want a form to appear requesting key information before the actual form is displayed.

For practice, make no selection. These options are disabled and cannot be selected.

8. Select Menu separator

Select this check box if you want a line to be drawn above the menu item's position in the menu list. Separators logically group related items.

For practice, make no selection. This option is disabled and cannot be selected.

9. Select Hide in Web Client

Select this check box if you do not want this menu item to appear in the Web Client.

For practice, make no selection. This option is disabled and cannot be selected.

10. Select Component Image Bitmap

If you are defining a level-two menu, a component, you can specify that an icon be associated with it in the Navigator.

For practice, make no selection.

11. Click Browse

To assign a bitmap file for a component image, click Browse and then locate the file using the standard Windows Browse dialog box.

For practice, make no selection.

12. Select Component Image Stretch

If you are defining a level-two menu, a component, you can specify that an icon be sized to fit the square in which it is displayed.

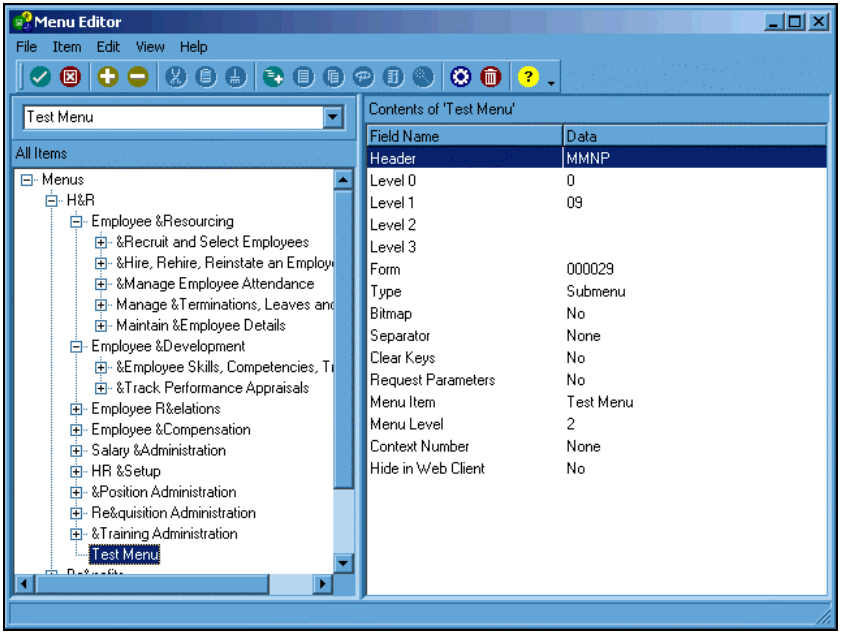
For practice, make no selection.

13. Click OK or press Enter

If you are satisfied with your entries, confirm this by clicking OK or pressing Enter.

For practice, click OK.

If you completed the Guided Practice, the dialog that is displayed should look similar to the example that follows:



14. Click Save

Click the Save button on the toolbar to save the new menu record.

For practice, click Save.

15. Click Exit

Click the Exit button on the Menu Editor toolbar.

If you close the dialog box without saving, a save dialog box will be displayed, asking you if you want to save your changes to the menu structure.

Note: Changes made to menu items lower than level three will only be displayed in the Menu bar.

For practice, click the Exit button on the Menu Editor toolbar.

See also:

- Menu Editor ***(on page 111)***

For more information about adding a menu item.

Defining a shortcut key for a menu item

To define a shortcut key, follow these steps:

1. Access the Menu Editor

Access this dialog by making the following selections from the Navigator:

Component: Development Tools
Process: System Control Repository Utilities
Task: Customize Menus

For practice, access the Menu Editor.

2. Select the item

Click the item in the tree view.

If the item is not displayed, use the expand function or the menu search function.

For practice, select 'Test Menu'.

3. Display the Add or Modify dialog box

- If you are defining a new item, click the parent item and click the Add button on the toolbar.
- If you are modifying an item, click the item and then click the Modify button on the toolbar.

For practice, access the Modify Submenu dialog box.

4. Point to Item Title

Point to the name of the item and click in the text box for the next step of adding the shortcut designation.

For practice, click in the Item Title text box.

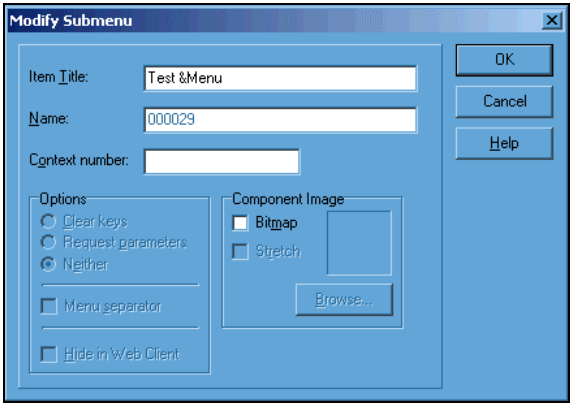
5. Enter an ampersand (&) before the character used as a shortcut key

Type an ampersand (&) immediately before the character to be used as a shortcut key.

Note: The system does not edit for duplicate shortcut keys. You will have to manually track your use of shortcut keys.

For practice, type an ampersand (&) before the letter M (&Menu).

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



6. Click OK

Click OK to activate the shortcut on the menu.

For practice, click OK.

See also:

■ Shortcut keys and menu items ***(on page 117)***

For more information about shortcut keys.

Changing the order of menu items

To change the order of menu items, follow these steps:

1. Access the Menu Editor

Access this dialog by making the following selections from the Navigator:

Component: Development Tools
Process: System Control Repository Utilities
Task: Customize Menus

For practice, access the Menu Editor.

2. Select the item to be relocated

In the tree view in the left pane, point to the item.

If the item is not displayed, use the expand function or the menu search function.

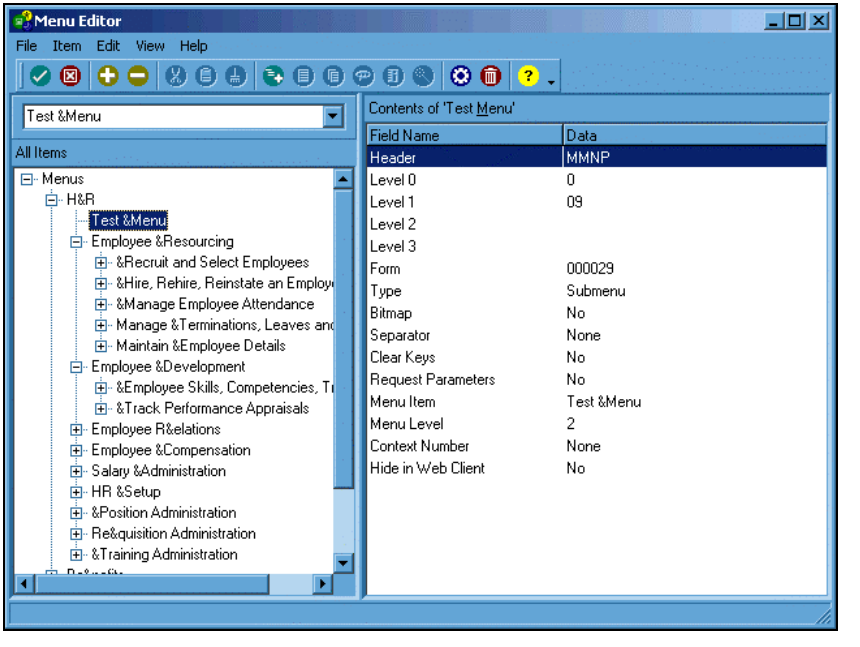
For practice, select 'Test &Menu'.

3. Drag the item to its destination

Hold down the mouse key and move the item. You can only drag the item to the same level within the menu structure.

For practice, drag the Test &Menu item to the top of the H&R list.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



4. Click Save

Click the Save button on the toolbar to save the new menu record.

For practice, click Save.

5. Click Exit

Click the Exit button on the Menu Editor toolbar.

For practice, click the Exit button on the Menu Editor toolbar.

See also:

- Order of menu items ***(on page 116)***

For more information about changing the order of menu items.

Modifying a menu item

To modify a menu item, follow these steps:

1. Access the Menu Editor

Access this dialog by making the following selections from the Navigator:

Component: Development Tools
Process: System Control Repository Utilities
Task: Customize Menus

For practice, access the Menu Editor.

2. Select the item to be modified

In the tree view in the left pane, click the item to be modified.

If the item is not displayed, use the expand function or the menu search function.

For practice, select 'Test &Menu'.

3. Click Modify

Click the Modify button on the toolbar. The Modify dialog box is displayed for the type of item selected.

For practice, click the Modify button.

4. Make the modifications

Make the required changes.

For practice, make any modifications.

5. Click OK or press Enter

If you are satisfied with your changes, confirm this by clicking OK or pressing Enter.

For practice, click OK.

6. Click Exit

Click the Exit button on the Menu Editor toolbar.

For practice, click the Exit button on the Menu Editor toolbar.

See also:

- Menu item changes ***(on page 119)***

For more information about modifying a menu item.

Deleting a menu item

To delete a menu item, follow these steps:

1. Access the Menu Editor

Access this dialog by making the following selections from the Navigator:

Component: Development Tools
Process: System Control Repository Utilities
Task: Customize Menus

For practice, access the Menu Editor.

2. Select the item to be deleted

Highlight the item to be deleted.

If the item is not displayed, use the expand function or the menu search function.

For practice, select 'Test &Menu'.

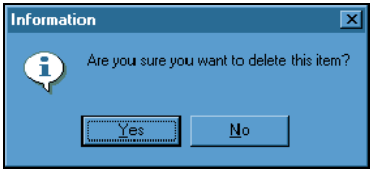
3. Click Delete

Click the Delete button on the toolbar. A dialog box appears, asking you to confirm your action.

For practice, click the Delete button.

4. Click Yes

Click Yes to confirm the deletion. The item, along with its associated sub-items, is immediately deleted.



For practice, click Yes.

5. Click Exit

Click the Exit button on the Menu Editor toolbar.

For practice, click the Exit button on the Menu Editor toolbar.

See also:

- Menu item deletion ***(on page 119)***

For more information about deleting a menu item.

Adding a report group to the menu

To add a report group to the menu, follow these steps:

Note: *Prior to adding a report group to the menu and using that item to launch a report group, you must add the report group to the system using the Report Group Activities form (RGMSTR). The name of the report group must end in 'RG' if it is to be launched online.*

This Guided Practice assumes that a new report group named 'PE-RRG' has already been added using the Report Group Activities form (RGMSTR).

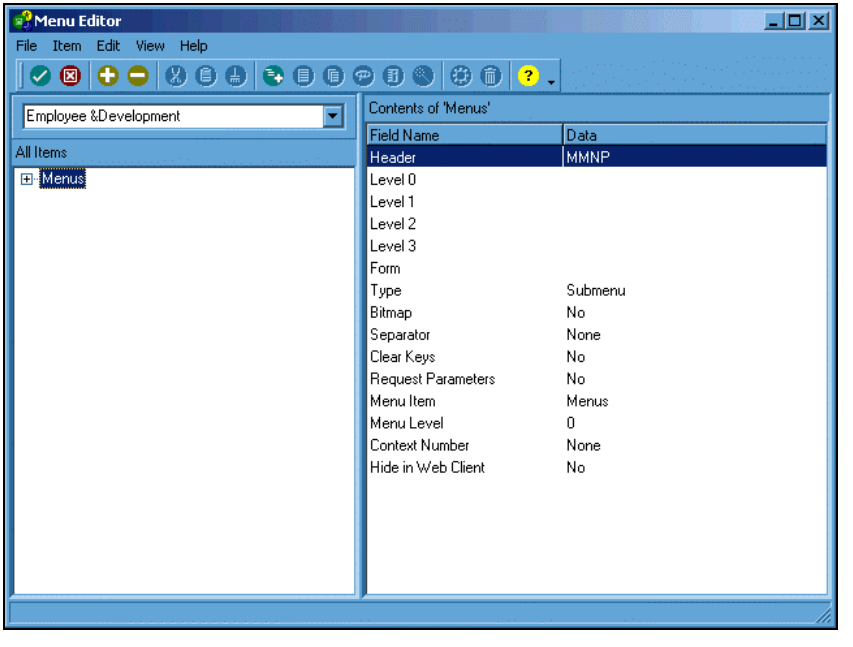
1. Access the Menu Editor

Access this dialog by making the following selections from the Navigator:

Component: Development Tools
Process: System Control Repository Utilities
Task: Customize Menus

For practice, access the Menu Editor.

If you completed the Guided Practice, the dialog that is displayed should look similar to the example that follows:



2. Expand the 'Menus' item

Click the plus sign (+) to the left of the 'Menus' item in the tree view in the left pane.

For practice, expand the 'Menus' item.

3. Expand the 'T&ools' parent item

Click the plus sign (+) to the left of the 'T&ools' parent item in the tree view in the left pane.

For practice, expand the 'T&ools' parent item.

4. Expand the '&Reporting' submenu

Click the plus sign (+) to the left of the '&Reporting' submenu in the tree view in the left pane.

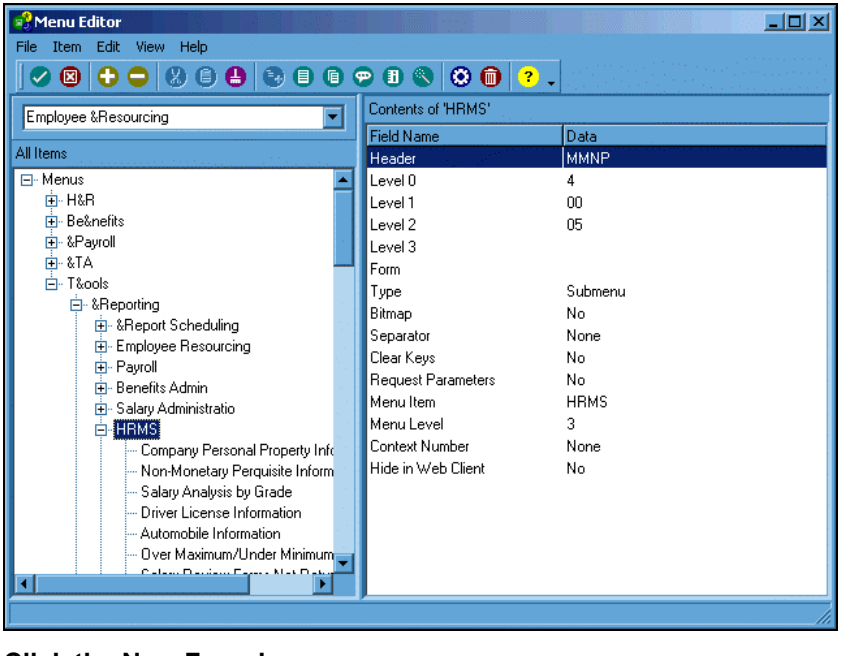
For practice, expand the '&Reporting' submenu item.

5. Select the report category to receive the new item

Click the report category below the Reporting submenu in the tree view in the left pane.

For practice, click the 'HRMS' report category.

If you completed the Guided Practice, the dialog that is displayed should look similar to the example that follows:



6. Click the New Form icon

Select the type of item to add by clicking the New Form icon on the toolbar. The Add New Form dialog appears.

For practice, click the New Form Icon.

7. Enter the Item Title

Type the report group title that should appear on the menu. This name can be up to 38 alphanumeric characters. This must match the title that was entered on the Add Report Group form (RGADD).

For practice, type 'PRACTICE EXERCISE'.

8. Enter the Name

Type the name of the report group. This must be the report group name that was entered on the Add Report Group form (RGADD).

For practice, type 'PE-RRG'.

9. Enter the Context number (optional)

Type the four-position context number for the help topic. Values must be numeric and within the range 8000–8999.

This option is only available for components and may be left blank when adding a report group.

For practice, leave this text box blank.

10. Select Options (optional)

If you are adding a form item, these options will be active. By default, 'Neither' is selected. No change in selection is required for a report group item.

For practice, select 'Neither' if it is not already displayed.

11. Select Menu separator (optional)

Select this check box if you want a line to be drawn above the menu item's position in the menu list. Separators logically group related items. No entry is required for a report group item.

For practice, make no selection.

12. Select Hide in Web Client (optional)

Select this check box if you do not want this report group option to appear in the Web Client.

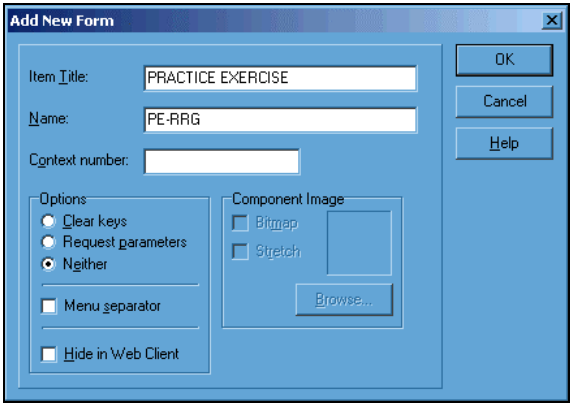
For practice, make no selection.

13. Bypass the Component Image selections

These items are not active for a report group item. You may bypass these selections.

For practice, bypass these selections.

If you completed the Guided Practice, the dialog that is displayed should look similar to the example that follows:

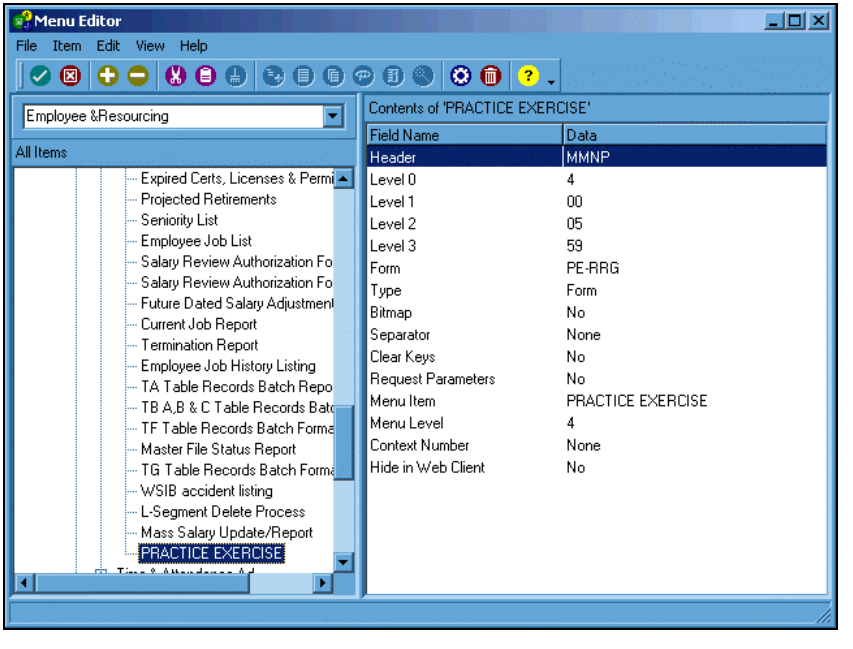


14. Click OK or press Enter

If you are satisfied with your entries, confirm this by clicking OK or pressing Enter.

For practice, click OK.

If you completed the Guided Practice, the dialog that is displayed should look similar to the example that follows:



15. Click Save

Click the Save button on the toolbar to save the new menu record.

For practice, click the Save button.

16. Click Exit

Click the Exit button on the Menu Editor toolbar. The new report group is now available on the Navigator and the menu.

If you close the dialog without saving, a Save dialog will be displayed, asking you if you want to save your changes to the menu structure.

For practice, click the Exit button on the Menu Editor toolbar.

See also:

- Menu Editor ***(on page 111)***

For more information about adding a report group to the menu.

Extended Practice

Using the Employee Resourcing submenu, add a submenu (level 3) named 'Maintain Company Property'. Assign a shortcut key to this item.

Then add two forms to the level 3 submenu with item names of 'Company Property' (form name 22-SCR) and 'Automobiles' (form name 24-SCR). Assign shortcut keys to each new form.

Save your changes. View your changes online.

Review of Questions Answered

1. What types of menus are delivered with the system?

2. What is the relationship between the menu structure and the Navigator?

3. What is the Menu Editor and how is it used?

PART 3

Integrating Desktop Applications and Data

In This Section

CHAPTER 6

Setting Up a Communication Event

In This Chapter

Introduction

In addition to recording employee information in the administrative solutions, your workflow process requires that some of that information be communicated to the employee or other areas of your organization. A communication events tool is provided that can be set up to send emails and print letters automatically or manually when employee data is created, updated, or deleted in the system.

Tasks

The following tasks are covered in this section:

- Creating a form trigger letter communication event
- Creating a form trigger email communication event
- Creating a checklist trigger letter communication event
- Creating a checklist trigger email communication event
- Changing to a different frequently used field list
- Adding a new field to a frequently used field list
- Creating a custom frequently used field list
- Copying a communication event
- Modifying a communication event
- Removing a communication event
- Adding forms to the exclusions option list

Prerequisites

Before you can use communication events, The Solution Series must be installed, and you must have the authority to set up communication events.

Questions answered

The following questions are answered in this section:

1. What is a communication event?
2. What are the types of communication events?
3. What is a communication event trigger?
4. What types of triggers are available?

Using communication events

Information recorded in the system becomes even more valuable when you have an automated tool to distribute that information to the employee and other need-to-know areas of your organization.

Business process considerations

Workflow management can be substantially enhanced when you implement communication events to replace the cumbersome task of communicating manually. Coupled with the impressive speed of email to reach recipients at your location and around the world, keeping people informed about updates to the employee database through automated events can help to improve the overall performance of your organization.

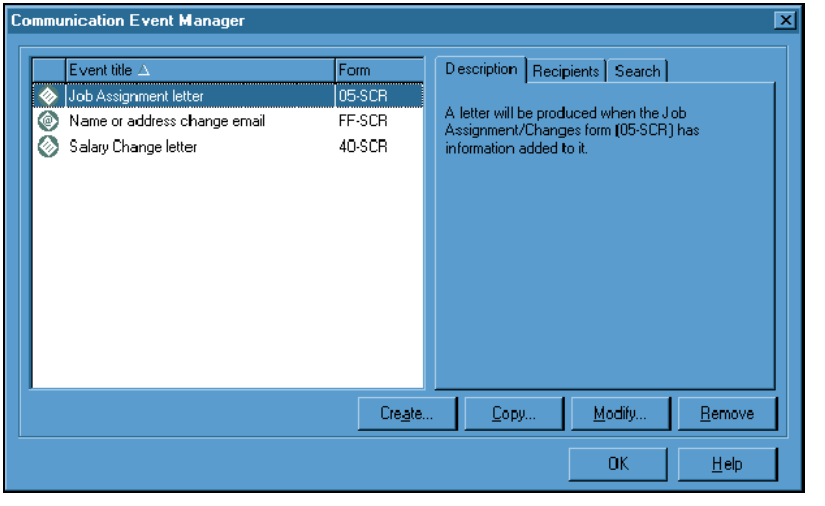
Communication events in the workflow

After it has been set up by an administrator, a communication event is system-wide and available to all system users. However, each user can specify unique options to provide departmental flexibility. Consider the following examples of ways to use the communication event process to improve workflow and communications capabilities throughout your organization:

- Email notifications to managers about applicants or candidates
- Welcome letters based on new hire information
- Email confirmations of employee job and location changes
- Congratulatory letters for employee promotions
- Email notifications of employee transfers or leaves of absence
- Scheduling confirmations for annual reviews
- Salary and salary range change notifications
- Tax information change confirmations
- Direct deposit setup or change notifications
- Bonus, commission, and perquisite notifications
- Company property assignment notifications
- Certificate, license, and permit notifications
- Email confirmations of physical exams
- Disciplinary action and grievance communications
- Benefit plan enrollment confirmations
- Dependent and beneficiary change confirmations
- Savings bond setup confirmation
- Badge assignment or deletion notification
- Schedule assignment confirmation
- Email notifications of training course refund information

Communication event types

The Communication Event Manager is the controller of this functionality. It allows you to create, copy, modify, and remove communication events:



Events are displayed in ascending order by title in the Event title list. By clicking on the arrow icon, you can toggle the display to show titles in descending alphanumeric order . By clicking on the Form heading, the events will be displayed, sorted by the form's system identifier.

There are three tabs—one that provides a description of the event, one that displays any email recipients defined to receive notification when the event occurs, and one that provides a means of searching for an event based on the email recipient's address. The search option is useful where a large number of events have been created (hundreds) and specific email addresses have been entered. By searching, the user can identify all emails that would automatically have been sent to somebody who, for instance, has changed departments or left the organization.

Using the Communication Event Manager dialog, you may set up parameters for the automatic and manual generation of two types of communication events—email and letter. Data to be contained within the email or letter comes from the form being used as well as delivered lists of frequently used fields. After communication event parameters are set up, the event can be modified, copied, and deleted.

Email communication events use your automated email software package.

Letter communication events use Microsoft Word 97 or any newer version. Letters can be created using its templates and mail merge features.

Communication event triggers

Event triggers allow you to set up the parameters that will cause a communication event. There are two types of communication event triggers within the Communication Event Manager—form and checklist.

See also:

- Creating a form trigger letter communication event *(on page 165)*

For detailed instructions for creating a letter communication event

- Creating a checklist trigger letter communication event *(on page 179)*

For detailed instructions for creating a letter communication event

- Creating a checklist trigger email communication event *(on page 184)*

For detailed instructions for creating an email communication event

Form trigger options

A form trigger can be set up to occur when you:

- Add information to a form
- Change information on a form
- Delete an existing form from the employee record

> Example: The Payroll department wants a letter to be generated when a new salary is assigned to an employee. The letter would congratulate the employee on the increased salary. This would be defined as a communication event to occur when information is added to the Salary Assignment/Changes form (40-SCR).

An additional parameter allows you to suppress the form trigger if the form is in a checklist, thereby preventing multiple events from being triggered from a single checklist.

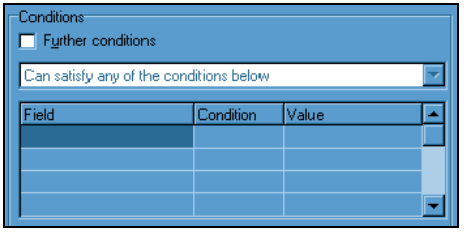
Because forms can change at the organization level, an option is provided that allows a communication event to only be triggered for a specific organization. For instance, different organizations may have different country codes or different functionality active, such as Position Administration—in which case the forms may have different fields displayed.

As well as an automatic trigger, you also have the option to manually generate letters and email when data is created for an employee. A manual trigger option allows you to generate a communication event by using a button on the toolbar when working with a form that has no automatic trigger.

When a manual trigger is available for a specific form, the Select an Email or Select a Letter button will be available on the toolbar. When you select one of these buttons, a selection dialog is displayed.

Form trigger conditions

You can specify additional conditions that must be satisfied before a specific form can trigger a communication event. For one or more text boxes on the form, you may define a condition and a value to be met.



The conditions available are dependent on the type of information. The following chart details the available conditions and the resulting value options for each type:

Field type	Conditions	Value
Alphanumeric	=, <>, >, <, =>, =< 'changed'	An alphanumeric value must be entered unless the condition of 'changed' is chosen.
Check box or Option button	=, <> 'changed'	The value field becomes a drop-down list that contains the values 'Yes' and 'No'.
Date	=, <>, >, <, =>, =< 'changed'	If these conditions are chosen, the date can be entered in any of the following formats. A right-click on the grid allows the option to display on the Cyborg standard calendar. You can enter 'Today', 'Today+n', or 'Today-n', where n is a number in the range 1 to 99. This can be entered in any case, with or without spaces. The abbreviation of '+n' and '-n' can also be entered as an abbreviation for the full statement. The calculation is performed on actual days, not working days.
Numeric	=, <>, >, <, =>, =< 'changed'	A numeric value must be entered. Decimal points (.) must be entered. Optionally, separators can be entered, for example, 1234.56 or 1,234.56 are both valid.

Field type	Conditions	Value
Option list	=(description) =(code) <>(code) >(code) <(code) =>(code) =<(code) 'changed'	The value field becomes a drop-down list that displays all descriptions or codes, depending on the condition chosen. A code of 'none' is treated as zero (0) and will trigger an event if all conditions are met. For example, if the condition is =<200 and 'none' is the code, then the condition is satisfied.

Note: The default condition is '=' (is equal to) until you change it. For Option Lists, the default is '=(description)' (is equal to description).

Example: The Payroll manager wants to be informed if anybody receives a salary increase of over 50,000.00 as this is likely to be a mistake. An additional condition is entered on the Salary Assignment/Changes form (40-SCR), which specifies [Amount Change > 50,000.00]. If this condition is satisfied because an employee is given an increase of more than 50,000.00, an email will be sent.

Form trigger profile

If form triggers need to be restricted to a particular group of users, a user profile condition can be set to include or exclude a person or group.

Note: User profiles define the system options available to a user or group of users. User profiles are created and maintained by your organization's security officer.

Note: An email or letter will only be produced if the form trigger, field condition, and profile condition are satisfied.

Example: The Payroll manager wants to know when a HR staff member makes a salary change, but does not want to know if a Payroll staff member makes a change. The condition could be set up to generate a communication event only if an HR profile or User ID triggered the form.

The opposite formula could be defined, and the event could be set up not to generate a communication event by supplying a list of Payroll profiles or User IDs.

Checklist trigger options

The checklist trigger options allow the checklist feature to be a powerful embedded workflow. A checklist trigger can be set up to occur when a user is working through a checklist and activates one of the following options:

- Finish Checklist after completing all the mandatory steps
- Finish Checklist without completing all the mandatory steps
- Pause Checklist

> Example: The HR department wants to generate a new hire letter welcoming all new employees to the company. This can be generated after all the mandatory forms have been created within the checklist.
>
> The HR manager would like to receive an email if a checklist is finished, but not all mandatory steps have been completed. This is important because the absence of some information may prevent an employee from receiving a salary.

Trigger events defined for a standalone form still occur if the form is part of a checklist. You must select the 'Suppress if a form is in a Checklist' option on the form trigger to prevent this.

Once you have created a communication event, you will not be able to change the type or trigger. If either one is incorrect, you must delete the communication event and create a new one with a corrected type or trigger.

Checklist trigger profile

The checklist trigger profile is identical to the form trigger profile, and follows the same rules.

If checklist triggers need to be restricted to a particular group of users, a profile condition can be set to include or exclude a person or group. An email or letter will be produced only if the checklist trigger and the profile condition are satisfied.

Excluded form triggers

Only employee forms and checklists can be used to trigger communication events. Non-employee and company forms are filtered out of the form browse dialog.

If there are specific forms that you want to exclude from the list of available triggers, you may add them to the Browse Forms - Email/Letters option list (SC50). Forms that appear in this option list are filtered out of the trigger list.

☞ *Refer to* **Maintaining Option Lists** *(on page 27) for information about using the Option List Editor (CSUPDT) and displaying option lists.*

Cyborg Scripting Language changes can be made to table forms so that they can be used with event triggers. Contact Cyborg Professional Services for assistance if your organization requires these changes.

See also:

- Adding forms to the exclusions option list ***(on page 199)***

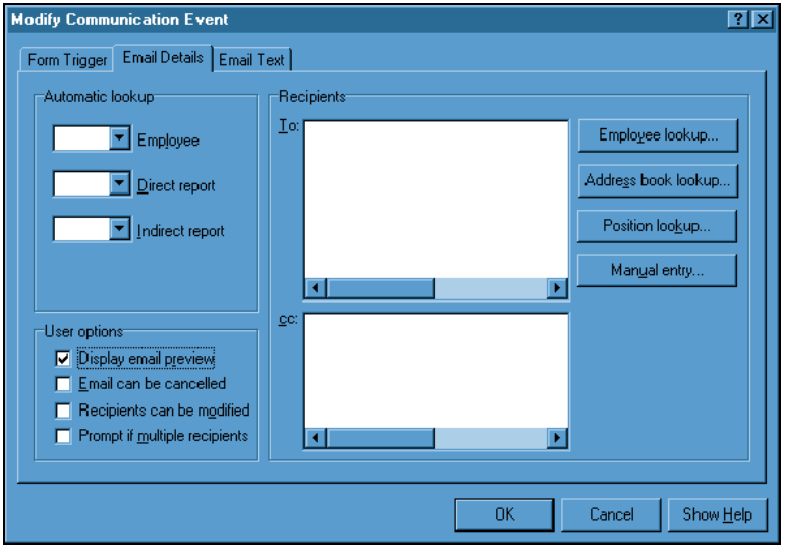
For detailed instructions for excluding forms.

Apply the Concept
Based on your understanding of the communication event triggers as explained in this concept, which business tasks in your organization require some employee or inter-office communication that could be triggered instead by a communication event?

Apply the Concept
In what cases are letters or memos being generated when emails could be more effective?

Email communication event details

An email communication event provides your company with more capabilities than standard email software. You will be provided with multiple methods for specifying the email recipient:



In addition, you will be able to insert data from the system forms into the text, so that employee-specific information can be automatically displayed.

See also:

- Creating a form trigger email communication event *(on page 172)*
- Creating a checklist trigger email communication event *(on page 184)*

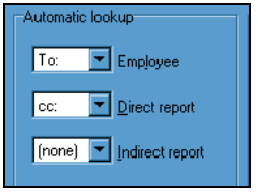
For detailed instructions for creating a email communication event

Recipients

There are several avenues for the lookup and selection of email recipients. You may send the email to the address of the employee for whom the data was recorded. You may also designate recipients other than the employee for whom the information was recorded.

Automatic lookup

The automatic lookup feature allows you to direct the email to the address of the employee for whom the data was recorded, as shown in the following example:



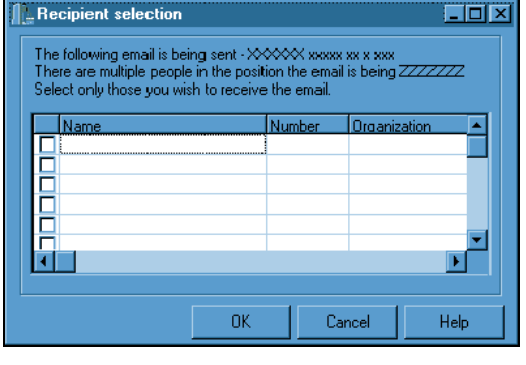
Either a 'To:' or 'cc:' choice can be made by using the drop-down list for each of the following options:

- Employee
  This method sends the email to the employee for whom the data is being recorded. An email address is located on the Employee Contact Information form (EM-SCR). If no email address is recorded on this form, then one is created from the information that is recorded on the Employee Name And Address (FF-SCR) and the Company Name And Address (AA-SCR)forms, for example, john_smith@cyborg.com.

- Direct report
  This option is only available to Position Administration users. The system locates the position record of the employee whose data is being recorded and, from that record, the position to which it reports (direct or indirect) can be found. The incumbents who hold that position, along with their email addresses, can then be identified.

  If there are multiple incumbents for a position, the system will either send email to all of them or prompt you at run time to choose an incumbent. This is dependent on the 'Prompt if multiple recipients' user option setting on the Email Details tab within the Modify Communication Event dialog.

  The following example shows the prompt displayed when this option is checked:



- Indirect report
  This option is only available to Position Administration users. This works in the same way as the direct report option.

You may customize the Cyborg Scripting Language to tailor the location of the email address or provide an alternative method of formulating it.

Note: When no recipients can be found, which may occur if the recipient has no email address recorded or if the position has no incumbency, no error will be displayed. If options have been set to display the preview dialog, this will be displayed and, if no recipient exists, the user will be allowed to add 'To' and 'cc' recipients, regardless of the options that were set.

Address types

Depending on the method you choose to locate the email address of a recipient, one of the following four icons will display next to each recipient in the Recipients list box to identify the address type:


Employee Lookup

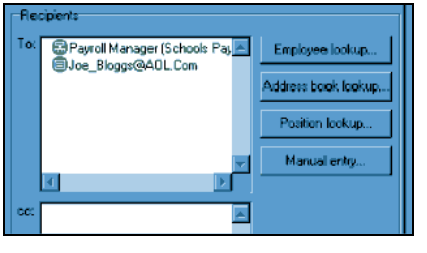

Position Lookup


Address Book Lookup


Manual Entry

If 'Employee', 'Direct report', or 'Indirect report' are selected, the items selected will appear in the disabled Recipients 'To' and 'cc' list boxes. The Position lookup icon will be used for each of these items. The word 'Employee', 'Direct report', or 'Indirect report' will be displayed to the right of the icon as shown in the following representation:

You may not type directly into the Recipients lists. Entries are made by selecting recipients through the automatic lookup option or the additional options provided on the Email Details tab within the Modify Communication Event dialog:



Lookup options

Several methods are available for finding email addresses of a recipient other than the person for whom the data was recorded. The following methods allow you to search several different areas of your system:

- Employee Lookup
  This method attaches an employee number as the recipient. To look up an employee, a name search allows you to type three or more characters of the employee's last name. The system then performs a search and displays a list of employee names that start with those characters. If you continue to type more characters, the search stops until you pause. It then continues to refine the list.

- Address book lookup
  The Address Book dialog will be supplied from your organization's email application. If you are already logged onto an email system, this will be used for the address book lookups and to send the email. If you are not logged onto the email system, the email password dialog will be presented.

- Position lookup
  This option is only available to Position Administration users. With this method, a position is assigned to the recipient. When the email is ready to be sent, the incumbents for the position are found and their email addresses are identified.

- Manual entry
  This method offers a dialog into which an email address can be manually entered. You must first select the Manual entry button and then type the email address for each recipient. If email addresses are entered directly, they must be monitored in the event that the addressee leaves the organization, so they can be redirected at that time.

Note: You can remove unwanted names from the Recipients list by highlighting the name and pressing the Delete key on your keyboard.

User options for email

Four user options allow you to fine-tune the email process after the recipient(s) and the text are recorded. You may choose to activate one or more of the following options on the Email Details tab within the Modify Communication Event dialog:

- Display email preview
  If this option is active, the user will be informed that the email is about to be sent, but no cancellation is allowed unless the next option is active as well.

- Email can be cancelled
  If this option is active, the user will be given the same dialog as in the first option, but a Cancel button will be available.

- Recipients can be modified
  If this option is active, the user will be able to add to and delete from the recipient list at execution time.

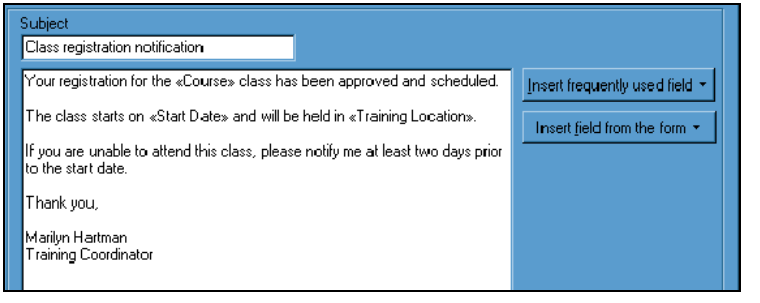
- Prompt if multiple recipients
  If this option is active, a dialog will display at execution time and the user may select the required recipient if a position had multiple recipients. If this option is not active and multiple recipients are encountered, the email is automatically sent to all recipients in the selected position.

Email text

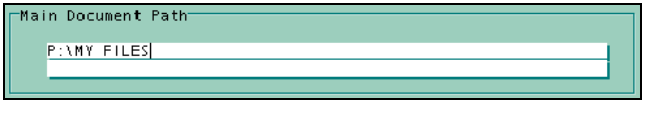
Standard text formatting is available for the email content. The text auto wraps, but is reformatted when it is sent to the email package. The Enter key inserts a line break. Tabs

are also supported. Two buttons allow you to insert system fields. Inserted fields are shown as field names within guillemets, for example, <<Address 2>>.

In the following example, an employee is being notified about registration for an upcoming class:



The text for the email is saved as a *.txt file. The file will be named the same as the event. The path for that file is defined on the System Options form (SCOPTS) in the Main Document Path text box:



If the Copy option has been used to create an event, then the text will also be copied from the original event.

See also:

- Copying a communication event ***(on page 195)***

For detailed instructions for copying a communication event.

- Modifying a communication event ***(on page 196)***

For detailed instructions for modifying a communication event.

- Removing a communication event ***(on page 198)***

For detailed instructions for removing a communication event.

Apply the Concept

Based on your understanding of the email communication event as explained in this concept, what method(s) would you use to determine the recipients and content of an email communication event in your organization?

Letter communication event details

A letter communication event provides your company with the ability to automatically generate customized letters based on specific trigger parameters.

Letters allow the same manual options as email events. For example, if a letter is manually triggered by a form, a Select a Letter button will be available on the toolbar. When you select the Select a Letter button, a letter selection dialog is displayed.

Microsoft Word template and merge features are included in the letter communication event process. All the functionality will work as described by Microsoft while creating the letter text. In addition, you will be able to insert fields from system forms into the text, so that employee-specific information can be automatically displayed.

If the Copy option has been used to create an event, then the text will also be copied from the original event.

See also:

- Creating a form trigger letter communication event ***(on page 165)***
- Creating a checklist trigger letter communication event ***(on page 179)***

For detailed instructions for creating a letter communication event

Working with Word templates

When you are ready to create the letter text, you will be presented with the template selection dialog provided by Microsoft Word. Templates may be added and changed within Word. After you have selected a template, a new document is created.

A Cyborg floating toolbar will automatically be placed within the window, offering options from which to select fields to be inserted. You may select from a list of fields contained on the trigger form. Alternatively, you may select fields from two delivered frequently-used-field lists containing selected extract fields.

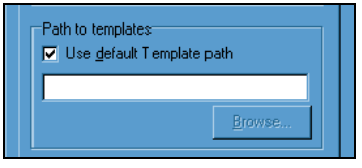
The following example could be the text of a letter that is sent to an employee who has been awarded a bonus or commission:

```
Congratulations ,
You have been awarded a  in the amount of $.
You will receive this amount on .
Sincerely,
G. Zarmin
Vice President, HR
```

Letter templates location

When a communication event letter is created, the templates associated with the letter event are stored in the location specified on the System Options form (SCOPTS). This location applies to all users.

The Path to templates group box on the Options dialog tells the system where to look for letter templates that have already been created when you trigger a letter communication event. When the 'Use default Template path' check box is checked, the system looks for the templates in the location specified on the System Options form (SCOPTS):



You can override where the system first looks for existing templates by leaving the Use default Template path check box unchecked and entering a location (drive and path) in the text box. This override location only applies to letter communication events triggered from your computer. Overriding the default location may be useful if the templates are stored on a network drive to which you temporarily do not have access.

The letter templates must be copied from the location specified on the System Options form (SCOPTS) to the location you specify on your Options dialog. When a letter communication event is triggered, the system first looks for the templates in the override location specified on the Options dialog. If the templates are not found, the system then looks in the location specified on the System Options form (SCOPTS). If the templates are still not found, an error message is displayed.

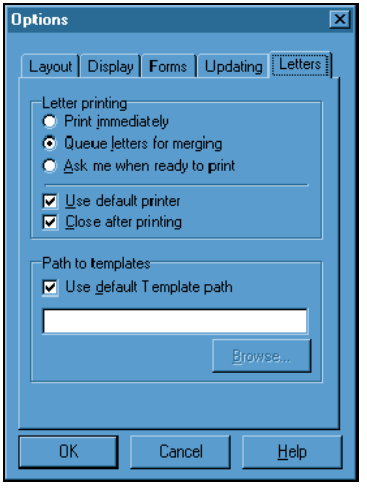
See also:

- Changing to a different frequently used field list ***(on page 189)***

For detailed instructions for changing to a different field list.

Letter printing

Letters can be viewed and modified prior to printing. If you choose to print the letter after a communication event is triggered, either manually or automatically, the Options dialog settings for Letters on your computer will control the printing:



Using the options on the Letters tab, you can control when and how letters are printed:

- Printed immediately, queued for later printing, or prompt before printing
- Use the default printer
- Close the word-processing application after printing

You can also specify where letter templates that have already been set up are located.

☞ *Refer to the Using The Solution Series: Administrative Solutions documentation for more information on selecting preferences in the Options dialog.*

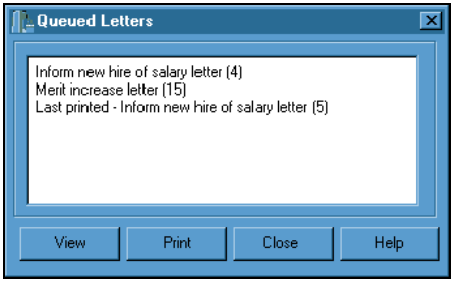
Immediate printing

When you select 'Print immediately', the letter is sent directly to the printer.

Queued printing

Selecting 'Queue letters for merging' sends generated letters to a queue, which you can later access at any time from the Office Integration toolbar. From the queue, you can view, edit, and print the letters at a time that is convenient for you. Multiple occurrences of the same type of communication event letter are merged into one document.

If you select the option to queue letters, a 'Show Queued Letters List' toolbar button will allow you to display a list of queued letters:



Note: *Changing or removing an event could cause problems with letters that are already generated but not printed.*

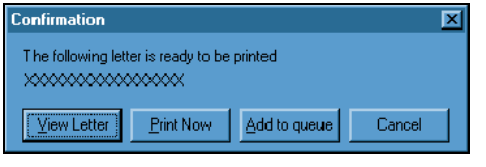
☞ *Refer to the Using The Solution Series: Administrative Solutions documentation for more information on launching the Office Integration toolbar to display this toolbar button.*

Queued letters are grouped by type, so that each type can be printed individually if required. The option to delete will only be available if you chose the option to cancel the letters at generation time.

Prompted printing

Selecting 'Ask me when ready to print' allows you to decide what to do with the letter when it is generated. When the letter is generated, you are given the option to view it, print it, or add it to the queue.

If you choose the option to 'Ask me when ready to print', a letter confirmation dialog is displayed. This dialog gives you control of the disposition of the letter:



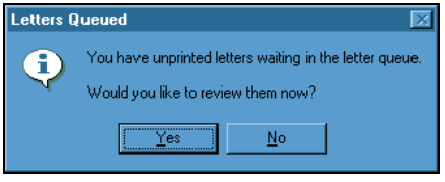
If you choose 'View Letter', Word is opened automatically, the data is merged, and the letters can be seen as a single word document. From this display, you can modify the letters, save them, or print them.

If you choose 'Add to queue', the letters are added to the mail merge queue. This option allows you to batch letters and print them all at one time.

Last printed file

The system maintains one 'last printed' file. This means that after letters have been viewed or printed, they are moved to a 'last printed' list at the bottom of the queued letters. This acts as a backup in the event that letters need to be reprinted. The 'last printed' list is replaced each time a new letter is generated. If letter 'A' was printed, and then letter 'B' was printed, there would be one last printed file for letter 'B'.

You will also be reminded and offered the opportunity to take action on queued letters when you exit The Solution Series. When you exit the system, you will be prompted with the following dialog:



Note: *If data fields in a letter are going to be changed, care must be taken to ensure that users do not already have queued letters for that event. This can result in queued letter files that contain different record layouts, which in turn will result in Word errors when the queued letter is viewed or printed. To be certain this will not happen, the existing event should be copied to a new name and the existing event disabled.*

Apply the Concept

Based on your understanding of the letter communication event as explained in this concept, what would be the advantage of queuing letters for printing later or being prompted when a letter is ready?

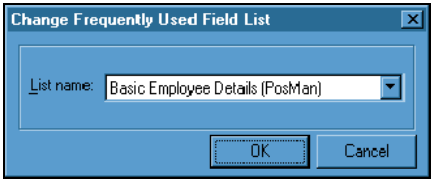
Inserting fields

The letter or email text may include specific data values from forms within the system. Making use of this option allows you to insert the most current and accurate information possible into the text of your email or letter. The following options are available for your use:

- Insert frequently used field
- Insert field from this form

Frequently used field list

When the 'Insert frequently used field' button is selected, a popup menu of the most popular fields is presented. You will have the ability to select a different list of fields from a drop-down list while setting up the communication event.



The following two lists are delivered in the system:

- Basic employee details (Position Administration)
  This list contains employee details such as name, address, salary information, position, job, and organization.
- Basic employee details (non Position Administration)
  This list contains employee details such as name, address, and salary information.

You may insert fields from only one frequently used field list. If you change to another list and use the same field(s), you must clear from your letter any fields that you inserted from the original list.

See also:

- Changing to a different frequently used field list ***(on page 189)***

For detailed instructions for changing to a different field list.

Alternative frequently used field lists

Only one frequently used field list can be used by a single event and, once in use, the list should not be changed without evaluating the effect on existing events.

However, you may add new fields to an existing list or create alternative lists. The Cyborg Scripting Language allows advanced validation conditions to be added as well.

Adding a new field

To add a new field to an existing frequently used field list, the Cyborg Scripting Language for the associated form (assuming all of the fields on the list originate from the same form) has to be edited and the field added to the form. If the field to be added does not currently

exist on the associated form, then a custom list from a new Cyborg Scripting Language form may be needed.

See also:

■ Adding a new field to a frequently used field list ***(on page 192)***
For detailed directions for using alternative frequently used field lists.

Creating a custom list from a new form

To create a frequently used field list from the fields contained on more than one form, you must create a new form that contains all the fields. To keep the process as simple as possible, the form can be created using FormBuilder and the added fields can be display-only fields.

After the new form has been created and named, it must be added to the Frequently used fields form option list (SC51). You can then select the new list from the Change Frequently Used Field List dialog for a form-triggered email or letter.

See also:

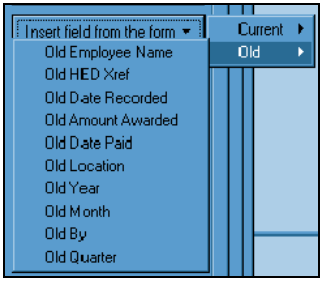
■ Creating a custom frequently used field list ***(on page 193)***
For detailed directions for creating a frequently used field list.

■ Adding a custom frequently used field list to the option list ***(on page 193)***
For detailed directions for adding a field list to the option list.

Fields on system forms

When the 'Insert field from the form' button is selected, a popup menu of available fields for the specified form is presented. The following example shows the fields that are displayed when the Bonus/Commission Information form (26-SCR) triggers the event:

The field names will be the same as those that appear on the form. If the automatic form trigger has been set to 'When information is amended', then all fields within the list will have a 'current' and 'old' value. As shown in the following example, the text 'Old' is used as a prefix to the appropriate fields to designate them as the prior value of the field:



The 'Insert field from this form' option will not be available if the event is being created for a checklist.

Apply the Concept
Based on your understanding of inserting fields as explained in this concept, what benefits can be derived from using system fields as part of your email and letter text?

Technical notes

Directory changes and changes to the Cyborg Scripting Language can be made that allow advanced functionality and conditions in the communication event features.

Default file location for communication event documentation

Newly-created email and letter events are stored on a common network drive as defined by the 120-character alphanumeric entry on the System Options form (SCOPTS):

If an override has been set up, the defined directory is checked for either the letter or email text. If the file is not found, the network directory is then checked.

Override files may be used in the following circumstances:

- When the user does not have access to the network directory, but still wants to produce letters or emails. It is up to the user to copy all letters and emails to the override directory. The user is also responsible for keeping them updated. The system does not attempt to maintain synchronization with the network directory.

- When the user wants to personalize a common (to all users) letter. It is the user's responsibility to maintain synchronization.

Changes to the document path do not take effect until the user logs off and back on again. Override files should be used with caution.

Alternative email address formats

When an email communication event is triggered, the Email Address for Position or Employee program (EM-POS) provides an email address for a position code or an employee number. It first looks at the Employee Contact Information form (EM-SCR) for the recorded email address. If no email address is available, then an email address is formulated using the employee name on the Employee Name And Address form (FF-SCR) and the company name on the Company Name And Address form (AA-SCR). The delivered format for this is:

First_Last@Organization.com

If your organization requires an alternative formula, the Cyborg Scripting Language may be altered at paragraph 700 of the Email Address for Position or Employee program (EM-POS):

```
70000   P700-FIND-EMAIL-ADDRESS.
70010   @
70020   @ If no email address is recorded on EM-SCR an address will
70030   @ be generated by the following code. The example format is
70040   @
70050   @         firstname_lastname@company.com
70060   @
70070   @ This must be changed to your correct format.
70080   @
70100     MOVE '_'     TO W6-01-220.  @ Name join character.
70110     MOVE '@'     TO W6-01-221.  @ Organization join character.
70120     MOVE '.COM' TO W6-04-222.  @ Extension.
70190   @
```

Advanced conditions

As well as allowing you to amend the fields that appear on the frequently used fields list, the communication event programs can also include advanced validation. This allows many records to be searched and complex conditions to be introduced. If after performing this validation, the email or letter generation is to be suppressed, a method of setting an 'Override' flag is provided. This flag, when set, prevents the generation of this communication event.

The Cyborg Scripting Language verb 'OVERRIDE-EVENTS' can be used to replace the value held on line 2, position 7, with an 'O' to prevent an update from taking place. This is the same location as the Add, Change, Delete indicator.

```
OVERRIDE-EVENTS.
or
SET SCREEN TO :88.
MOVE 'O' TO SCREEN.
```

Frequently used field list from more than one form

Although for the majority of situations, a single frequently used fields form is sufficient to hold all the data needed for a letter or email, it is possible that occasionally you will need a larger number.

An ideal example of this is to produce a letter detailing all the benefit plans in which an employee is enrolled, including the dependents and beneficiaries.

To do this, functionality has been included that will allow a primary frequently used fields form to call other forms. The calls can not be nested more than one level. In other words, the primary form must list all the subsequent forms to call.

The field labels should be unique within a frequently used fields form. If the primary form calls other forms, field labels in the primary form and called forms should be unique, as all of these labels are to be grouped together. If duplicate labels exist, a suffix is included in the field label. For example:

- Annual Salary
- Annual Salary (1)

To invoke multiple forms to be called, line 00000 of the Screen Appearance Table record should be edited and each called form added. Multiple forms should be separated with a comma (or alternatively a space), as shown in the following example:

SRRCCWL	TLS	Field	Label
00000		XX-SCR,YY-SCR,ZZ-SCR	

This multiple form list on line zero is only called by the Graphical User Interface and is not used by the Cyborg Scripting Language. This facility should be used sparingly, because multiple form calls will introduce an obvious degradation in performance.

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Completing the Guided Practice

Prior to starting the detailed directions, it is suggested that you turn on the Office Integration toolbar so you can access the communication event buttons.

Access the toolbar by making the following selections from the menus:

View ► Customize Toolbars

Then click the Toolbars tab, select Office integration, and click Close.

Creating a form trigger letter communication event

To create a letter communication event triggered by a form, follow these steps:

1. Access the Communication Event Manager dialog

Access this dialog by making the following selections from the Navigator:

Component: Administrator Tools
Process: Administrator Tools
Task: Manage Events

The Communication Event Manager dialog is displayed.

For practice, access the Communication Event Manager dialog.

2. Click Create

Click Create to add a new communication event.

The Create Communication Event dialog is displayed.

For practice, click Create.

3. Enter a Title

Type a unique title, up to 40 characters, for this communication event.

For practice, type 'Bonus or Commission letter'.

4. Select Letter

By default, Letter is the communication event Type selected when the dialog is first displayed. Verify that Letter is selected.

For practice, verify that Letter is selected.

5. Select Form

By default, Form is the communication event Trigger type selected when the dialog is first displayed. Verify that Form is selected.

For practice, verify that Form is selected.

6. Click OK

Click OK to create the communication event.

Note: You can not change the Type or Trigger type after clicking OK on the Create Communication Event dialog.

The Modify Communication Event dialog is displayed.

For practice, click OK.

7. Select the Form name

Select the form on which this communication event will be triggered by clicking the ellipsis (…) on the right side of the Form name list box. The Browse Forms dialog will show the menu structure from which you can select a form by drilling down through the menus. Click OK after you make the selection.

The form name is displayed in the text box.

For practice, expand the Employee Compensation component; then expand the Manage Employee Compensation process; then select the Bonuses and Commissions task and click OK.

8. Select the automatic trigger conditions (optional)

Select 'Trigger automatically' and then select one of the following conditions to automatically trigger the communication event when the selected condition is met:

- When information is added
- When information is amended (updated)
- When a record is deleted

For practice, select 'Trigger automatically' and then select 'When information is added'.

9. Select manual trigger (optional)

Select 'Trigger when selected from toolbar' to allow users the ability to trigger this communication event manually using the 'Select a Letter' button on the toolbar when working with the selected form:

If 'Trigger when selected from toolbar' is not selected, this communication event will only occur if the conditions specified on the Form Trigger tab are met.

This option is only available for the automatic trigger of 'When information is added'.

For practice, do not select this check box.

10. Select Suppress if a form is in a Checklist (optional)

Select 'Suppress if a form is in a Checklist' if you do not want the communication event to occur when the form is part of a checklist workflow.

Check this option if the form you selected is part of a checklist and you would prefer to produce one letter that summarizes all of the information entered during the checklist, instead of sending out multiple letters that are triggered by specific forms within the checklist.

For practice, select 'Suppress if a form is in a Checklist'.

11. Rename the Communication event title (optional)

Enter a name in the Communication event title text box only if you want to change the title of this communication event.

For practice, make no change to the entry in this text box.

12. Select Only trigger for specific Organization

If you want this communication event to be triggered for only one Organization, select 'Only trigger for specific Organization'. Then click the down arrow and select the Organization to which this communication event applies.

For practice, select 'Only trigger for specific Organization' and select 'ACME MANUFACTURING' from the drop-down list.

13. Select Further conditions (optional)

To specify field or profile conditions that must be met in order to trigger this communication event, select the Further conditions check box.

For practice, make no entry in this check box.

14. Specify field conditions (optional)

The Further conditions check box must be selected for any condition to be in effect. Field, Condition, and Value collectively specify a condition that must be met to trigger this communication event.

If more than one condition (row of Field, Condition, and Value) is specified, the selection from the list box above the conditions determines whether one or all conditions must be met to trigger the communication event.

Use the arrow keys or point and click to navigate between the cells of the grid.

- Field
  Double-click the field cell to list all fields by their identifying labels on the form. If a label is not specified by the form code, the system name for the field will be displayed.

Note: If the form contains option lists, the option list code and the option list description are treated as separate fields.

- Condition
  Double-click the condition cell to display a list of conditions. When you select a field from the list of field labels, this list box is populated by an equal sign (=) to signify a condition. You may change this default condition by selecting an option from the drop-down list box. The conditions displayed will depend on the trigger and field type.

- Value
  When you select a field from the list of field labels and select a condition, you must enter a value to complete the condition. When entering a numeric value, specify the decimal point if appropriate.

  If you want to include a future or past date within a range of days, type 'today+n' or 'today-n' where n is the number of days in the range of 1 to 99. For example, 'today+14' would include the current date through 14 days forward.

  If an option list description is selected, you can choose the value from a drop-down list.

For practice, make no entry in these text boxes.

15. Specify profile conditions (optional)

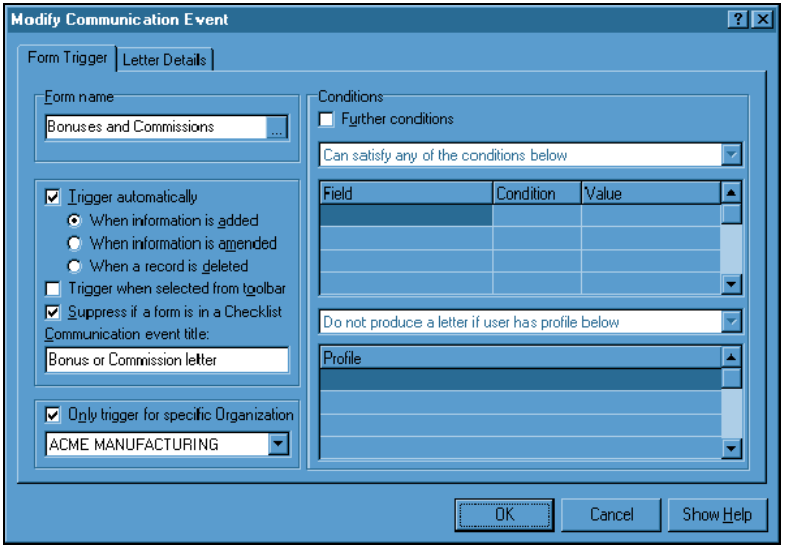
To have the profile or user ID of the person using the form affect whether the communication event occurs, specify an ID or profile in the Profile text box and make a selection in the list box above it.

Whether these users are excluded or included will depend on the selection in the drop-down list box.

Note: The Further conditions check box must be selected for the profiles to be in effect.

For practice, make no entries for Profile.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



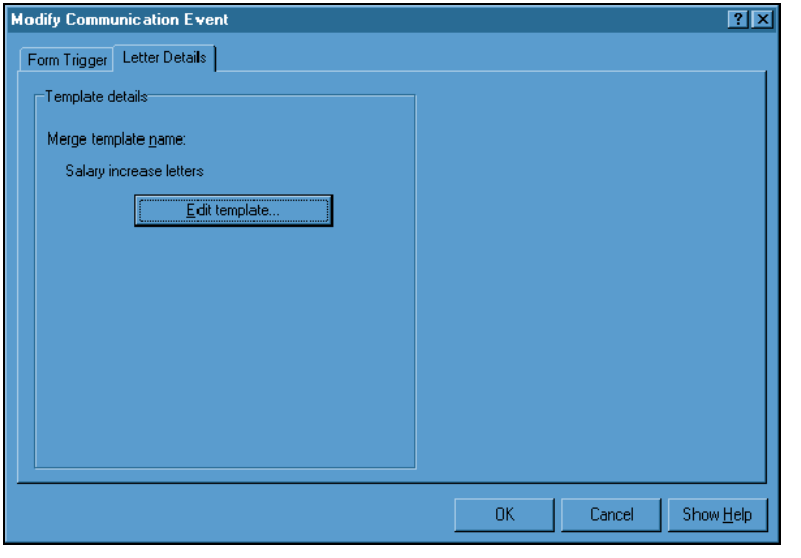
16. Select the Letter Details tab

Select the Letter Details tab to create or modify the letter for this communication event.

The Letter Details dialog is displayed.

For practice, select the Letter Details tab.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



17. Click Edit template

Click Edit template to create a template for the letter communication event.

For practice, click Edit template.

The system will launch Microsoft Word 97 (or higher version).

18. Select the template

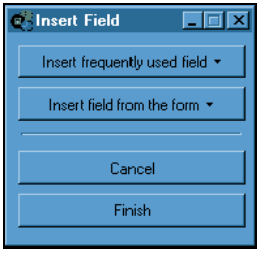
Select the template to be used for this letter communication event.

For practice, select the Letters and Faxes tab, 'Contemporary Letter.dot' (or the 'Blank Document'), and then click OK.

19. Type the letter

Type the body of the letter for this communication event in Word.

To insert fields into the letter, select the 'Insert frequently used field' or 'Insert field from the form' option from the floating window.

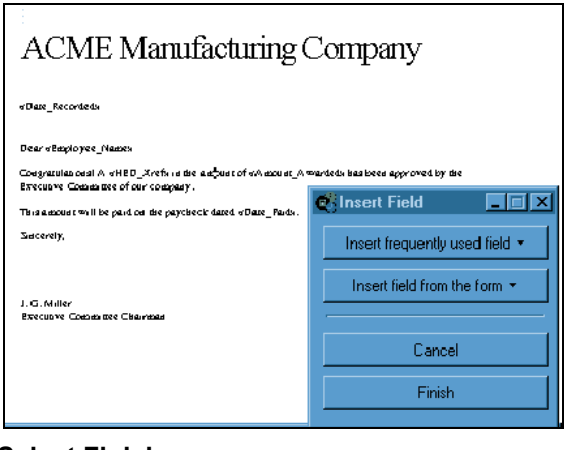


Fields may be selected from both the frequently used fields and the form fields for the same event. However, you may not select fields from more than one frequently used field list for the same event.

Note: The position code and position description are listed in the frequently used fields only. The form fields contain only the position code.

For practice, type the letter text for ACME Manufacturing Company and use the 'Insert field from form' list to insert the employee name and address, as well as the type, date paid, and amount of the bonus or commission.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



20. Select Finish

Select Finish on the floating window to save the document and close Word.

For practice, click Finish.

21. Click OK

Click OK to save the communication event and close the Modify Communication Event dialog.

The Communication Event Manager dialog is displayed. The Communication Event will take place when the event conditions are satisfied.

For practice, click OK.
A letter will be produced when the Bonus/Commission Information form (26-SCR) has information added to it.

See also:

- Communication event triggers ***(on page 145)***

For more information on communication event triggers.

- Letter communication event details ***(on page 155)***

For more information on letter communication events.

Creating a form trigger email communication event

To create an email communication event triggered by a form, follow these steps:

1. Access the Communication Event Manager dialog

Access this dialog by making the following selections from the Navigator:

Component:	Administrator Tools
Process:	Administrator Tools
Task:	Manage Events

For practice, access the Communication Event Manager dialog.

The Communication Event Manager dialog is displayed.

2. Click Create

Click Create to add a new communication event.

For practice, click Create.

The Create Communication Event dialog displays.

3. Enter a Title

Type a unique title, up to 40 characters, for this communication event.

For practice, type 'Name or Address Change email'.

4. Select Email

By default, Letter is the communication event Type selected when the dialog is first displayed. Select Email by clicking on its option button.

For practice, click Email.

5. Select Form

By default, Form is the communication event Trigger type selected when the dialog is first displayed. Verify that Form is selected.

For practice, verify that Form is selected.

6. Click OK

Click OK to create the communication event.

Note: You can not change the Type or Trigger type after clicking OK on the Create Communication Event dialog.

The Modify Communication Event dialog is displayed.

For practice, click OK.

7. Select the Form name

Select the form on which this communication event will be triggered by clicking the ellipsis (…) on the right side of the Form name list box. The Browse Forms dialog will show the menu structure from which you can select a form by drilling down through the menus. Click OK after you make the selection.

The form name is displayed in the text box.

For practice, expand the Employee Resourcing component; then expand the Hire, Rehire, Reinstate an Employee process; then select the Name and Address task and click OK.

8. Select the automatic trigger conditions (optional)

Select 'Trigger automatically' and then select one of the following conditions to automatically trigger the communication event when the selected condition is met:

- When information is added
- When information is amended
- When a record is deleted

For practice, select 'Trigger automatically' and then select 'When information is amended'.

9. Select manual trigger (optional)

Select 'Trigger when selected from toolbar' to allow users the ability to trigger this communication event manually using the 'Select an Email' button on the toolbar when working with the selected form:

If 'Trigger when selected from toolbar' is not selected, this communication event will only occur if the conditions specified on the Form Trigger tab are met.

This option is only available for the automatic trigger of 'When information is added'.

For practice, you may not select this check box because it is not available.

10. Select Suppress if a form is in a Checklist (optional)

Select 'Suppress if a form is in a Checklist' if you do not want the communication event to occur when the form is part of a checklist workflow.

Check this option if the form you selected is part of a checklist and you would prefer to produce one letter that summarizes all of the information entered during the checklist, instead of sending out multiple letters that are triggered by specific forms within the checklist.

For practice, select 'Suppress if a form is in a checklist'.

11. Rename the Communication event title (optional)

Enter a name in the Communication event title text box only if you want to change the title of this communication event.

For practice, make no change to the entry in this text box.

12. Select Only trigger for specific Organization

If you want this communication event to be triggered for only one Organization, select 'Only trigger for specific Organization'. Then click the down arrow and select the Organization to which this communication event applies.

For practice, select 'Only trigger for specific Organization' and select 'ACME MANUFACTURING' from the drop-down list.

13. Select Further conditions (optional)

To specify field or profile conditions that must be met in order to trigger this communication event, select the Further conditions check box.

For practice, make no entry in this check box.

14. Specify field conditions (optional)

The Further conditions check box must be selected for any condition to be in effect. Field, Condition, and Value collectively specify a condition that must be met to trigger this communication event.

If more than one condition (row of Field, Condition, and Value) is specified, the selection from the list box above the conditions determines whether one or all conditions must be met to trigger the communication event.

Use the arrow keys or point and click to navigate between the cells of the grid.

- Field
  Double-click the field cell to list all fields by their identifying labels on the form. If a label is not specified by the form code, the system name for the field will be displayed.

Note: If the form contains option lists, the option list code and the option list description are treated as separate fields.

- Condition
  Double-click the condition cell to display a list of conditions. When you select a field from the list of field labels, this list box is populated by an equal sign (=) to signify a condition. You may change this default condition by selecting an option from the drop-down list box. The conditions displayed will depend on the trigger and field type.

- Value
  When you select a field from the list of field labels and select a condition, you must enter a value to complete the condition. When entering a numeric value, specify the decimal point if appropriate.

  If you want to include a future or past date within a range of days, type 'today+n' or 'today-n' where n is the number of days in the range of 1 to 99. For example, 'today+14' would include the current date through 14 days forward.

  If an option list description is selected, you can choose the value from a drop-down list.

For practice, make no entries in these text boxes.

15. Specify profile conditions (optional)

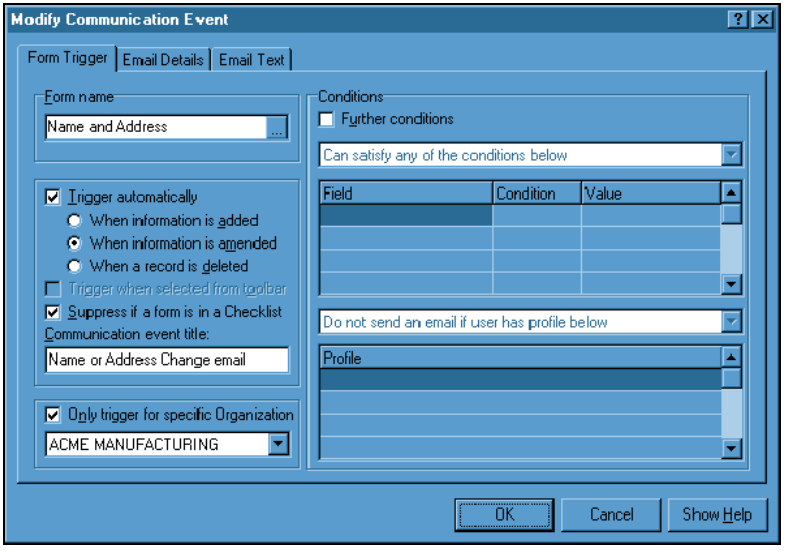
To have the profile or user ID of the person using the form affect whether the communication event occurs, specify an ID or profile in the Profile text box and make a selection in the list box above it.

Whether these users are excluded or included will depend on the selection in the drop-down list box.

Note: The Further conditions check box must be selected for the profiles to be in effect.

For practice, make no entries for Profile.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



16. Select the Email Details tab

Select the Email Details tab to create or modify information for this communication event.

The Email Details dialog is displayed.

For practice, select the Email Details tab.

17. Select the Automatic lookup options

Use these options to have the system automatically look up and send the communication event, as a To: or cc:, to the employee for whom the form or checklist is recorded. If Position Administration is in use, choose the automatic lookup to send the communication event to the direct report and indirect report.

For practice, in the Employee drop-down list, select 'To:'.

18. Select the User options

Choose the option(s) that will allow you to interact with the email communication event:

- Display email preview
  When checked, a preview of the email will display when this communication event is triggered. If not checked, the email generated by this communication will be sent without the opportunity to preview it.

- Email can be cancelled
  When checked, this option allows the email created by this communication event to be cancelled before it is sent.

- Recipients can be modified
  When checked, the To: and cc: fields in the email created by this communication event can be modified when the email is generated. Recipients may be added or deleted. Checking this option also causes the option 'Prompt if multiple recipients' to be checked.

- Prompt if multiple recipients
  When checked, the user will be prompted to select the recipients of the email if the position (within Position Administration has more than one recipient. If this option is not checked, the email will be sent to all incumbents in the reports to position.

For practice, select the first three options.

19. Select Recipients

Use these options to select recipients other than the employee for whom the form or checklist was recorded:

- Employee lookup
  Click to display a list of employees. You may select one or multiple employees as To: and cc: recipients of the email. Type the first few characters of the name, and the system will present an alphabetic list containing names matching your entry.

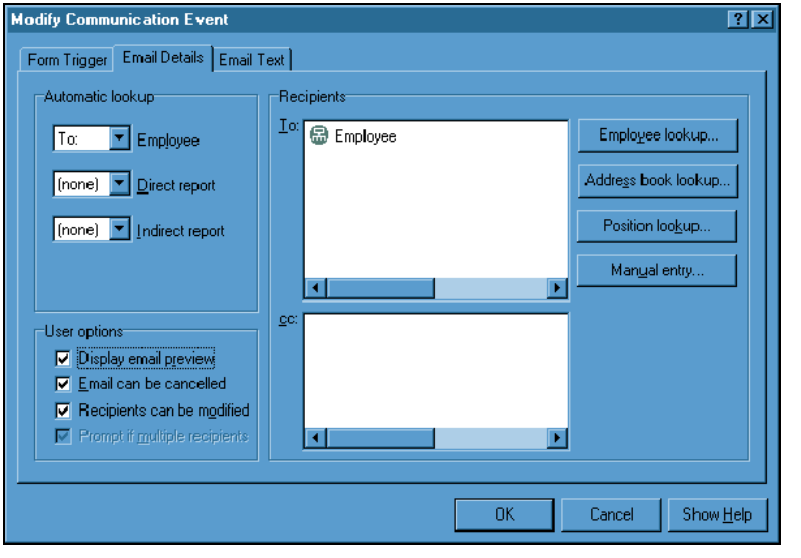
- Address book lookup
  Click to display a list of addresses from those already configured within your company's email application. You may select one or multiple employees as To: and cc: recipients of the email. If you have multiple address books, you can change the address book from which you make your selection.

- Position lookup
  Click to display a list of positions (as configured by Position Administration). You may select one or multiple positions as To: and cc: recipients of the email. Drill through the organization units until you find the one you want. All positions within that organization unit will then be listed. Select the position you want, and then press the To: or cc: button.

- Manual entry
  Click to display an entry dialog that allows you to type in a specific email address, for example, S_Austin@cyborg.com.

For practice, make no selections.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



20. Select the Email Text tab

Use this tab to create or modify the subject and text for the communication event.

The Email Text tab dialog is displayed.

For practice, select the Email Text tab.

21. Enter the Subject

This text box contains the title for the email. It is the title that the recipients of the email will see in their inbox.

For practice, type a subject that reflects a name or address change confirmation.

22. Enter the email text

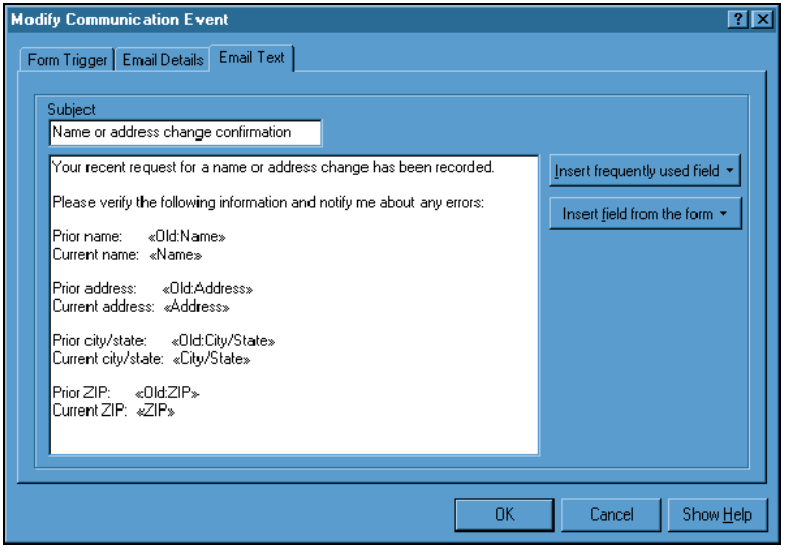
This text box contains the body of the email. To insert a line break in your text, press Enter. You can insert fields from the frequently used field list or from the form by clicking the button. These fields will then be replaced by the actual data when the email is created.

Fields may be selected from both the frequently used fields and the form fields for the same event. However, you may not select fields from more than one frequently used field list for the same event. The frequently used field list can be tailored to include fields that you may want to use, but are not currently in the list.

Note: The position code and position description are listed in the frequently used fields only. The form fields contain only the position code.

For practice, type the email event text that asks the recipient to verify the revised name or address data that has been recorded on the system. Use the 'Insert field from the form' list to include the old and new name and address information.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



23. Click OK

Click OK to save the communication event and close the Modify Communication Event dialog.

The Communication Event Manager dialog is displayed. The Communication Event will take place when the event conditions are satisfied.

For practice, click OK.
An email will be sent to the employee when changes are made to the Employee Name And Address form (FF-SCR).

See also:

- Communication event triggers ***(on page 145)***

For more information on communication event triggers.

- Email communication event details ***(on page 150)***

For more information on email communication events.

Creating a checklist trigger letter communication event

To create a letter communication event triggered by a checklist, follow these steps:

1. Access the Communication Event Manager dialog

Access this dialog by making the following selections from the Navigator:

Component: Administrator Tools
Process: Administrator Tools
Task: Manage Events

For practice, access the Communication Event Manager dialog.

The Communication Event Manager dialog is displayed.

2. Click Create

Click Create to add a new communication event.

For practice, click Create.

The Create Communication Event dialog displays.

3. Enter a Title

Type a unique title, up to 40 characters, for this communication event.

For practice, type 'New Hire Introduction letter'.

4. Select Letter

By default, Letter is the communication event Type selected when the dialog is first displayed. Verify that Letter is selected.

For practice, verify that Letter is selected.

5. Select Checklist

By default, Form is the communication event Trigger type selected when the dialog is first displayed. Select Checklist.

For practice, select 'Checklist'.

6. Click OK

Click OK to create the communication event.

Note: You can not change the Type or Trigger type after clicking OK on the Create Communication Event dialog.

The Modify Communication Event dialog is displayed.

For practice, click OK.

7. Select the Checklist name

Click on the Checklist name down arrow to select the checklist that will trigger this communication event. The checklist name is displayed in the text box.

Note: If you create a communication event that uses the Cyborg-delivered New Hire checklist as a trigger, you may not specify the 'New Hire initial dialog' item (500001) as the trigger checklist. This is a dialog that navigates to other checklists. Checklist events may only be assigned to checklists with forms.

For practice, click on the Checklist name down arrow and select 'New Hire'.

8. Select the automatic trigger condition

Select one or more of the three conditions listed in the Letter Triggered when a Checklist group box to specify when this communication event should occur.

- Finished - all mandatory steps complete
  Select this option to trigger the communication event only if all of the mandatory steps have been completed when the person working through the checklist clicks the Finish Checklist control. 'Finished - mandatory steps not complete' should not be selected.

- Finished - mandatory steps not complete
  Select this option to trigger the communication event when the person working through the checklist clicks the Finish Checklist control. Mandatory steps do not have to be complete in order to trigger the communication event.

- Checklist paused
  Select this option to trigger the communication event when the person working through the checklist clicks the Pause Checklist control.

For practice, select 'Finished - all mandatory steps complete'.

9. Rename the Communication event title (optional)

Enter a name in the Communication event title text box only if you want to change the title of this communication event.

For practice, make no change to this entry.

10. Select Further conditions (optional)

To specify profile conditions that must be met in order to trigger this communication event, select the Further conditions check box.

For practice, make no selection in this check box.

11. Specify Profile conditions (optional)

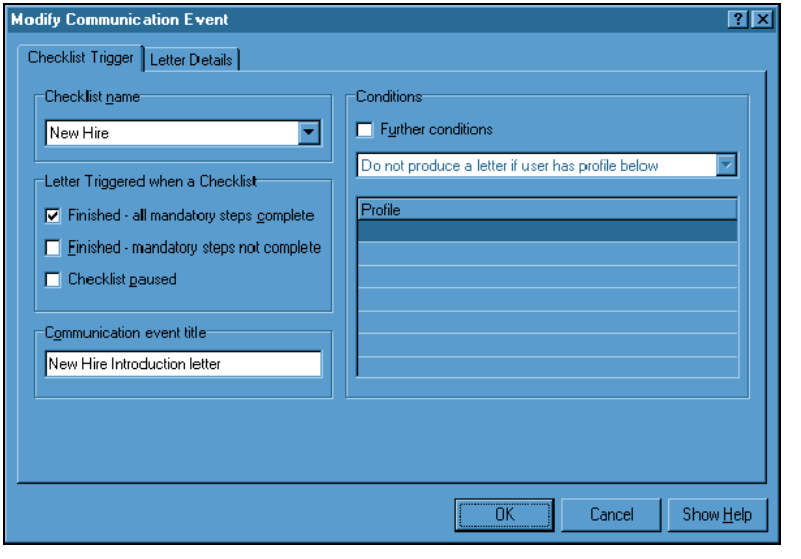
To have the Profile or user ID of the person using the checklist affect whether the communication event occurs, specify an ID or profile in the Profile text box and make a selection in the list box above it.

Whether these users are excluded or included will depend on the selection in the drop-down list box.

Note: The Further conditions check box must be selected for the profiles to be in effect.

For practice, make no entry for Profile.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



12. Select the Letter Details tab

Select the Letter Details tab to create or modify the letter for this communication event.

The Letter Details dialog is displayed.

For practice, select the Letter Details tab.

13. Click Edit template

Click Edit template to create a template for the letter communication event.

The system will launch Microsoft Word 97 (or higher version).

For practice, click Edit template.

14. Select the template

Select the template to be used for this letter communication event.

For practice, select the Letters and Faxes tab, 'Professional Letter.dot' (or 'Blank Document'), and then click OK.

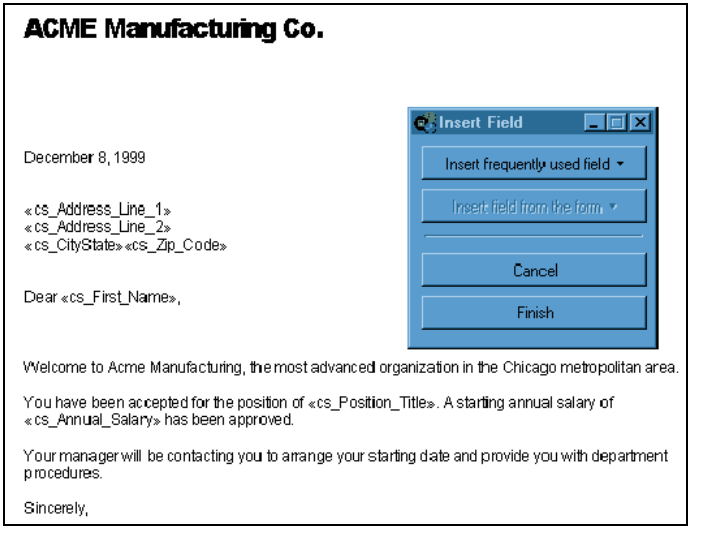
15. Type the letter

Type the body of the letter for this communication event in Word.

To insert fields into the letter, select the 'Insert frequently used field' option from the floating window.

For practice, type the letter text that welcomes the new employee to the company and states appropriate new hire information. Use the 'Insert frequently used field' list to include company, employee, and salary information.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



16. Select Finish

Select the Finish option on the floating window to save the document and close Word.

For practice, click Finish.

17. Click OK

Click OK to save the communication event and close the Modify Communication Event dialog.

The Communication Event Manager dialog is displayed. The Communication Event will take place when the event conditions are satisfied.

For practice, click OK.
A letter will be produced when the New Hire Checklist is finished and all mandatory steps have been completed.

See also:

- Communication event triggers ***(on page 145)***

For more information on communication event triggers.

- Letter communication event details ***(on page 155)***

For more information on letter communication events.

Creating a checklist trigger email communication event

To create an email communication event triggered by a checklist, follow these steps:

1. Access the Communication Event Manager dialog

Access this dialog by making the following selections from the Navigator:

Component: Administrator Tools
Process: Administrator Tools
Task: Manage Events

The Communication Event Manager dialog is displayed.

For practice, access the Communication Event Manager dialog.

2. Click Create

Click Create to add a new communication event.

The Create Communication Event dialog displays.

For practice, click Create.

3. Enter a Title

Type a unique title, up to 40 characters, for this communication event.

For practice, type 'New Hire Checklist email'.

4. Select Email

By default, Letter is the communication event Type selected when the dialog is first displayed. Select Email.

For practice, select 'Email'.

5. Select Checklist

By default, Form is the communication event Trigger type selected when the dialog is first displayed. Select Checklist.

For practice, select 'Checklist'.

6. Click OK

Click OK to create the communication event.

Note: You can not change the Type or Trigger type after clicking OK on the Create Communication Event dialog.

The Modify Communication Event dialog is displayed.

For practice, click OK.

7. Select the Checklist name

Click on the Checklist name down arrow to select the checklist that will trigger this communication event. The checklist name is displayed in the text box.

Note: If you create a communication event that uses the Cyborg-delivered New Hire checklist as a trigger, you may not specify the 'New Hire initial dialog' item (500001) as the trigger checklist. This is a dialog that navigates to other checklists. Checklist events may only be assigned to checklists with forms.

For practice, click on the Checklist name down arrow and select 'New Hire'.

8. Select the automatic trigger condition

Select one or more of the three conditions listed in the Email triggered when a Checklist group box to specify when this communication event should occur.

- Finished - all mandatory steps complete
  Select this option to trigger the communication event only if all of the mandatory steps have been completed when the person working through the checklist clicks the Finish Checklist control. 'Finished - mandatory steps not complete' should not be selected.

- Finished - mandatory steps not complete
  Select this option to trigger the communication event when the person working through the checklist clicks the Finish Checklist control. Mandatory steps do not have to be complete in order to trigger the communication event.

- Checklist paused
  Select this option to trigger the communication event when the person working through the checklist clicks the Pause Checklist control.

For practice, select 'Finished - all mandatory steps complete'.

9. Rename the Communication event title (optional)

Enter a name in the Communication event title text box only if you want to change the title of this communication event.

For practice, make no change to this entry.

10. Select Further conditions (optional)

To specify profile conditions that must be met in order to trigger this communication event, select the Further conditions check box.

For practice, make no selection in this check box.

11. Specify Profile conditions (optional)

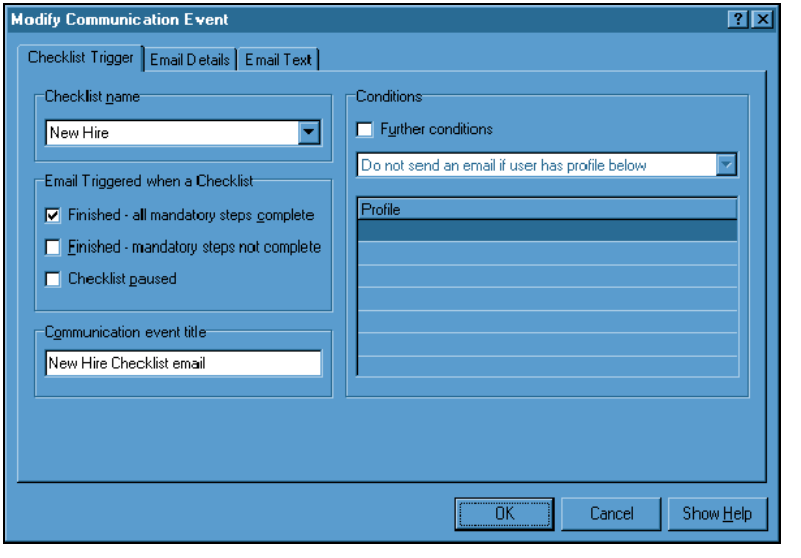
To have the profile or user ID of the person using the checklist affect whether the communication event occurs, specify an ID or profile in the Profile text box and make a selection in the list box above it.

Whether these users are excluded or included will depend on the selection in the drop-down list box.

Note: The Further conditions check box must be selected for the profiles to be in effect.

For practice, make no entry for Profile.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



12. Select the Email Details tab

Select the Email Details tab to create or modify information for this communication event.

The Email Details dialog is displayed.

For practice, select the Email Details tab.

13. Select the Automatic lookup options

Use these options to have the system automatically look up and send the communication event, as a To: or cc:, to the employee for whom the form or checklist is recorded. If Position Administration is in use, choose the automatic lookup to send the communication event to the direct report and indirect report.

For practice, from the drop-down list for Direct report, select 'To:'. From the drop-down list for Indirect report, select 'cc:'.

14. Select the User options

Choose the option(s) that will allow you to interact with the email communication event:

- Display email preview
  When checked, a preview of the email will display when this communication event is triggered. If not checked, the email generated by this communication will be sent without the opportunity to preview it.

- Email can be cancelled
  When checked, this option allows the email created by this communication event to be cancelled before it is sent.

- Recipients can be modified
  When checked, the To: and cc: fields in the email created by this communication event can be modified when the email is generated. Recipients may be added or deleted. Checking this option also causes the option 'Prompt if multiple recipients' to be checked.

- Prompt if multiple recipients
  When checked, the user will be prompted to select the recipients of the email if the position (within Position Administration) has more than one recipient. If this option is not checked, the email will be sent to all incumbents in the reports to position.

For practice, select the first three options.

15. Select Recipients

Use these options to select recipients other than the employee for whom the form or checklist was recorded:

- Employee lookup
  Click to display a list of employees. You may select one or multiple employees as To: and cc: recipients of the email. Type the first few characters of the name, and the system will present an alphabetic list containing names matching your entry.

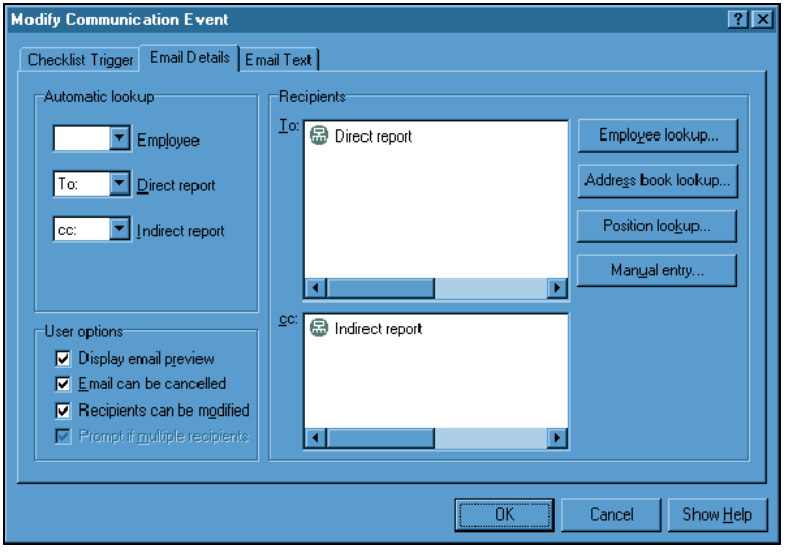
- Address book lookup
  Click to display a list of addresses from those already configured within your company's email application. You may select one or multiple employees as To: and cc: recipients of the email. If you have multiple address books, you can change the address book from which you make your selection.

- Position lookup
  Click to display a list of positions (as configured by Position Administration). You may select one or multiple positions as To: and cc: recipients of the email. You can drill through the organization units until you find the one you want. All positions within that organization unit will then be listed. Select the position you want, and then press the To: or cc: button.

- Manual entry
  Click to display an entry dialog that allows you to type in a specific email address, for example, S_Austin@cyborg.com

For practice, make no selections.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



16. Select the Email Text tab

Use this tab to create or modify the subject and text for the communication event.

The Email Text tab dialog is displayed.

For practice, select the Email Text tab.

17. Enter the Subject

Type the title for the email. This is the title that the recipients of the email will see in their inbox.

For practice, type a subject that refers to the new hire notification that will be sent to the direct and indirect report for the new employee.

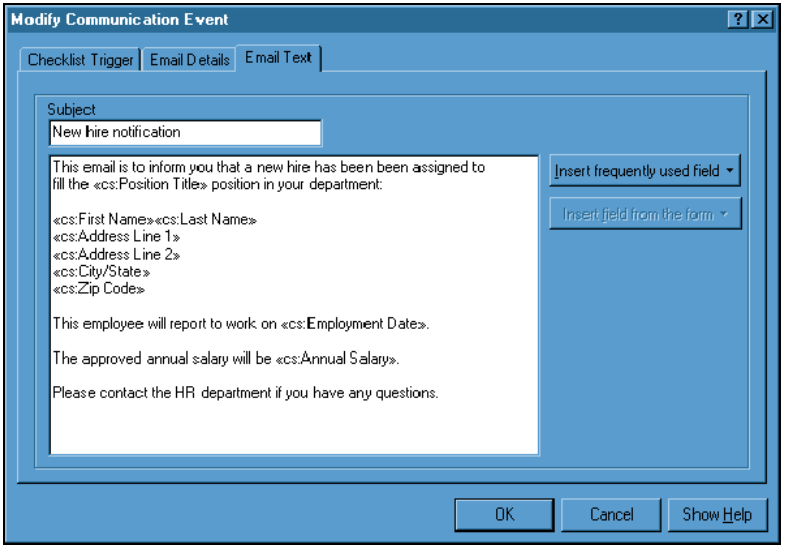
18. Enter the email text

This text box contains the body of the email. To insert a line break in your text, press Enter. You can insert fields from the frequently used field list by clicking the button. These fields will then be replaced by the actual data when the email is created.

The frequently used field list can be tailored to include fields that you may want to use, but are not currently in the list.

For practice, type the email event text that notifies the recipients that a new employee has been hired. Use the 'Insert frequently used field' list to include employee information.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



19. Click OK

Click OK to save the communication event and close the Modify Communication Event dialog.

The Communication Event Manager dialog is displayed. The Communication Event will take place when the event conditions are satisfied.

For practice, click OK.
An email will be sent to the direct and indirect reports when the New Hire checklist is finished and all mandatory steps have been completed.

See also:

- Communication event triggers ***(on page 145)***

For more information on communication event triggers.

- Email communication event details ***(on page 150)***

For more information on email communication events.

Changing to a different frequently used field list

To change to a different frequently used field list, follow these steps:

1. Access the Communication Event Manager dialog

Access this dialog by making the following selections from the Navigator:

Component: Administrator Tools
Process: Administrator Tools
Task: Manage Events

For practice, access the Communication Event Manager dialog.

The Communication Event Manager dialog is displayed.

2. Select an event

Select a communication event by clicking on it.

The communication event is highlighted.

For practice, select 'New Hire Checklist email'.

3. Click Modify

Click Modify to change the selected communication event.

The Modify Communication Event dialog is displayed.

For practice, click Modify.

4. Click the Email Text tab or Letter Details tab

If the communication event is an email event, click the Email Text tab. If the communication event is a letter, click the Letter Details tab.

The tab is displayed.

For practice, click the Email Text tab.

5. Click Edit Template (letter only)

If the communication event is a letter, click the Edit Template button.

If the communication event is an email, skip this step.

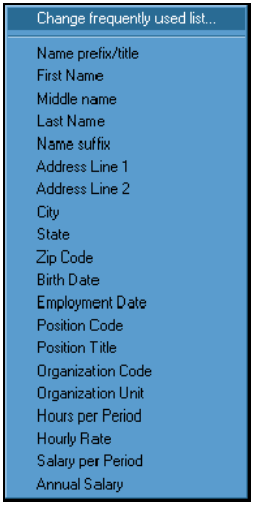
For practice, skip this step.

6. Click Insert frequently used field

Click Insert frequently used field to display a list of frequently used fields.

For practice, click Insert frequently used field.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



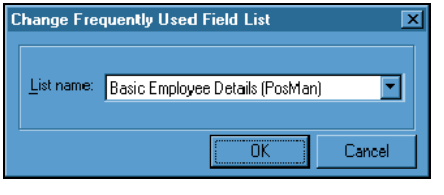
7. Select Change frequently used list

Select Change frequently used list option.

The Change Frequently Used Field List dialog is displayed.

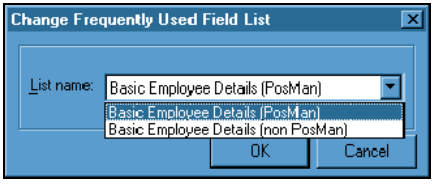
For practice, select Change frequently used list.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



8. Select a List name

Select a different field list from the List name list box.

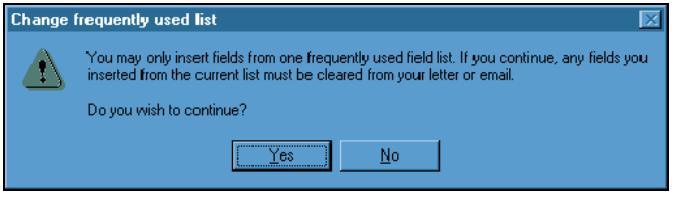


For practice, select Basic Employee Details (non PosMan).

9. Click Yes

Because you may only insert fields from one frequently used field list, a warning message is displayed.

If you click Yes, the new list may be used, but you must clear all prior frequently used fields from the letter or email.



If you click No, the Email Text dialog is displayed with no change in the frequently used list that was used for the text.

For practice, click Yes.

10. Click OK

Click OK to change the field list and close the Change Frequently Used Field List dialog.

For practice, click OK.

11. Click Insert frequently used field

Click Insert frequently used field to display the new field list.

The new frequently used field list is displayed and you may make your selections for the letter or email text.

For practice, select Insert frequently used field.
The Basic Employee Details (non PosMan) list is displayed.

See also:

- Inserting fields ***(on page 160)***

For more information on options available for inserting fields into email and letter text.

Adding a new field to a frequently used field list

To add a new field to a frequently used field list, follow these steps:

1. Copy the Screen Appearance Table (GETSAT)

2. Use Form Builder to add the new field and label to the Screen Appearance Table

3. Alter the Cyborg Scripting Language that supports the Screen Appearance Table to locate the new data item (optional)

4. **Load the amended Screen Appearance Table (PUTSAT)**

5. **Change to this frequently used list in the Modify Communication Event dialog.**

6. **Select the new field from the frequently used field list.**

See also:

- Inserting fields ***(on page 160)***

For more information on using alternative frequently used field lists.

Creating a custom frequently used field list

To create a custom frequently used field list, follow these steps:

1. **Use FormBuilder to create a new Screen Appearance Table and add its fields and labels**

2. **Write new Cyborg Scripting Language code to support the new form and locate its associated data fields**

3. **Load the new Screen Appearance Table (PUTSAT)**

4. **Add the new frequently used field list program name to the Frequently used fields form option list (SC51)**

5. **Change to this frequently used list in the Modify Communication Event dialog**

6. **Select fields from the new frequently used field list**

See also:

- Inserting fields ***(on page 160)***

For more information on using alternative frequently used field lists.

Adding a custom frequently used field list to the option list

To add a custom frequently used field list to the option list using the Option List Editor (CSUPDT), follow these steps:

1. **Access the Option List Editor (CSUPDT)**

Access this dialog by making the following selections from the Navigator:

Component:	Development Tools
Process:	Option Lists
Task:	Edit

For practice, access the Option List Editor (CSUPDT).

2. Enter the Option List Name

Type the name of the option list to be edited.

For practice, type 'SC51'.

3. Click Find Now

The system displays the detailed information for the requested option list.

For practice, click Find Now.

4. Click Create

A blank line is inserted, allowing you to add the new item.

For practice, click Create.

5. Enter the Code

Type the new frequently used field list program name, such as 'FUFSCR'. This identifies the form from which the fields will be displayed in the frequently used field list.

For practice, type 'FUFSCR'.

6. Enter the Description

Type a description of up to 20 characters for the code. This is the description that will be displayed in the Change Frequently Used Field List dialog List name drop-down list box.

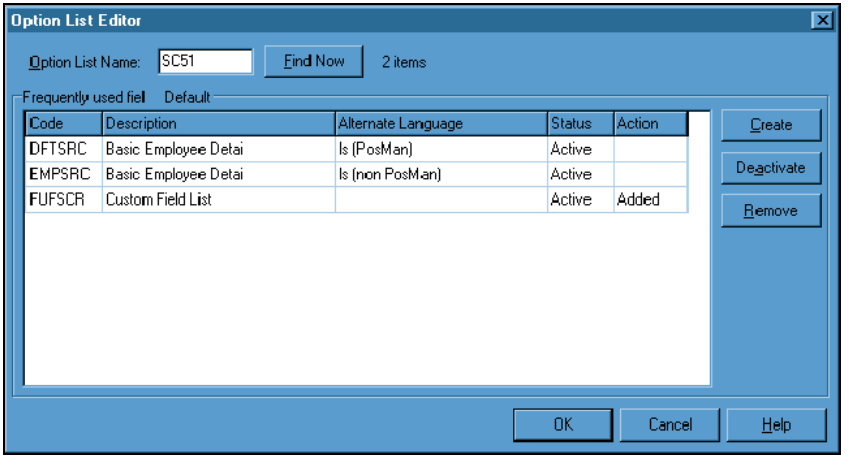
For practice, type 'Custom Field List'.

7. Enter the Alternate Language

If an alternate language is being used, type the description for the code in that language.

For practice, leave this text box blank.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



8. Click OK or press Enter

No items are added to the option list until you click OK. When OK is clicked, the new item is immediately added to the option list. No confirmation message is displayed.

For practice, click OK.

See also:

- Inserting fields ***(on page 160)***

For more information on alternative frequently used field lists.

Copying a communication event

To create a new communication event by copying an existing one, follow these steps:

1. Access the Communication Event Manager dialog

Access this dialog by making the following selections from the Navigator:

Component: Administrator Tools
Process: Administrator Tools
Task: Manage Events

The Communication Event Manager dialog is displayed.

For practice, access the Communication Event Manager dialog.

2. Select an event

Select the communication event by clicking on it.

The communication event is highlighted.

For practice, select 'Name or Address Change email'.

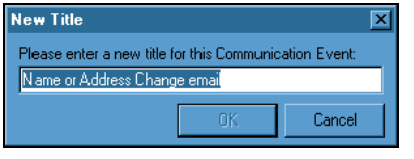
3. Click Copy

Click Copy to create a duplicate of the selected communication event.

The New Title dialog is displayed with the name of the original communication event.

For practice, click Copy.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



4. Enter a title

Type a unique title, up to 40 characters, for the new communication event.

For practice, type 'Name or Address email_Paris'.

5. Click OK

Click OK to save the copied communication event. A communication event is created with the new title.

The Modify Communication Event dialog is then displayed to allow changes to the copied event.

For practice, click OK.

6. Click OK

Make modifications, if any, and click OK to save the communication event changes and close the Modify Communication Event dialog.

The Communication Event Manager dialog is displayed.

For practice, click OK.

See also:

- Using communication events ***(on page 143)***

For more information on the communication event functionality.

Modifying a communication event

To change the details of a communication event, follow the steps below:

Note: You can not change the communication event type (letter or email) or trigger (form or checklist).

1. Access the Communication Event Manager dialog

Access this dialog by making the following selections from the Navigator:

Component: Administrator Tools
Process: Administrator Tools
Task: Manage Events

The Communication Event Manager dialog is displayed.

For practice, access the Communication Event Manager dialog.

2. Select an event

Select the communication event by clicking on it.

The communication event is highlighted.

For practice, select the 'Name or Address Change email' communication event.

3. Click Modify

Click Modify to change the selected communication event.

The Modify Communication Event dialog is displayed.

For practice, click Modify.

4. Make the changes

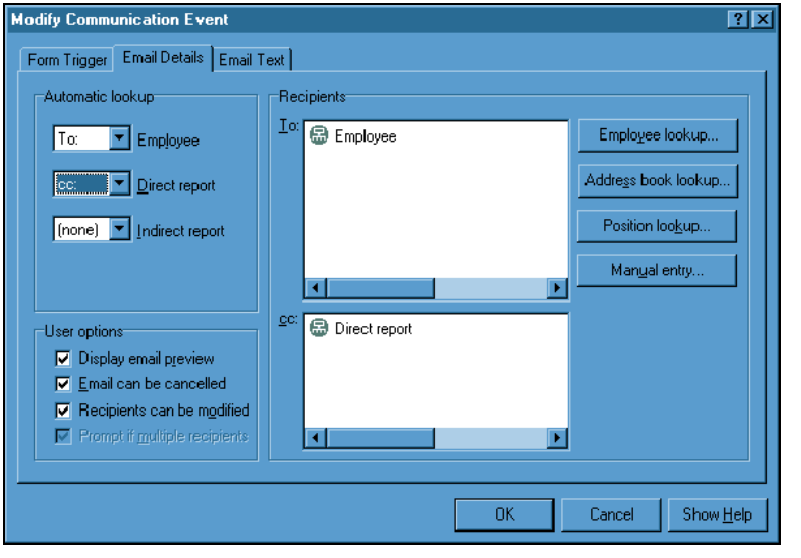
Make changes to the communication event.

Modifying a communication event is similar to creating an event. Access the desired tabs by clicking on them.

To delete a value, select it and then press the Delete key.

For practice, access the Email Details tab. From the Direct report drop-down list in the Automatic lookup section, select the 'cc:' option.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



5. Click OK

Save your changes by clicking OK.

The Communication Event Manager dialog is displayed.

For practice, click OK.

See also:

- ***Using communication events (on page 143)***

For more information on the communication event functionality.

Removing a communication event

To remove a communication event, follow these steps:

1. Access the Communication Event Manager dialog

Access this dialog by making the following selections from the Navigator:

Component:	Administrator Tools
Process:	Administrator Tools
Task:	Manage Events

The Communication Event Manager dialog is displayed.

For practice, access the Communication Event Manager dialog.

2. Select an event

Select the event by clicking on it.

The event is highlighted.

For practice, select the 'Name or Address email_Paris' communication event.

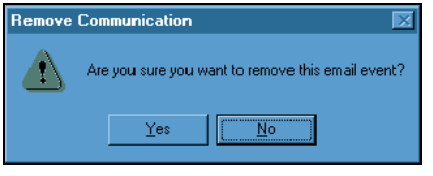
3. Click Remove

Click Remove to delete the selected communication event.

The Remove Communication dialog is displayed.

For practice, click Remove.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



4. Click Yes

Click Yes to remove the communication event.

The selected communication event is removed.

For practice, click Yes.

See also:

- Using communication events ***(on page 143)***

For more information on the communication event functionality.

Adding forms to the exclusions option list

To add forms to the Browse Forms - Email/Letters option list (SC50) using the Option List Editor, follow these steps:

1. Access the Option List Editor (CSUPDT)

Access this dialog by making the following selections from the Navigator:

Component:	Development Tools
Process:	Option Lists
Task:	Edit

2. Enter the Option List Name

Type the name of the option list to be edited—'SC50'.

3. Click Find Now

The system displays the detailed information for the requested option list.

4. Click Create

A blank line is inserted, allowing you to add the new item.

5. Enter the Code

Type the program name of the form to be excluded, such as 'EF-SCR'.

6. Enter the Description

Type 'E' to indicate that this form is to be excluded as an event trigger. This indicator prevents the specified form from being displayed by the form browser.

7. Click OK or press Enter

No items are added to the option list until you click OK. When OK is clicked, the new item is immediately added to the option list. No confirmation message is displayed.

See also:

- Communication event triggers ***(on page 145)***

For more information on communication event triggers.

Extended Practice

Create a form-triggered email event that will notify an employee when a physical exam appointment has been recorded. The event may be automatically triggered, or you may select a manual trigger. You may select the form name by expanding the Employee Relations component, then expanding the Manage Employee Health and Safety process, and selecting the Physical Exams Scheduled/Completed (18-SCR) task.

Set up the event so that it is triggered when information is added to the form. Set the option to preview or cancel the email. Create the appropriate email text and insert fields from the form to describe items such as the appointment date and physician. After you complete the event parameters, execute the form for a 999999 organization employee (such as Jerry Jones, employee number 1111) and preview the email.

Review of Questions Answered

1. What is a communication event?

2. What are the types of communication events?

3. What is a communication event trigger?

4. What types of triggers are available?

CHAPTER 7

Exporting and Importing Data

In This Chapter

Introduction

The ability to retrieve data from the administrative solutions, perform calculations or manipulate that information, and then import that enhanced data to update company and employee records allows your organization to reap the highest benefits from your system. This section introduces you to the export process and describes how to use the import feature to design and process imports that will update your company and employee records.

Tasks

This section explains the following:

- Creating a data extract using Reporting Administration
- Creating an import profile
- Renaming an import profile
- Modifying an import profile
- Starting an import
- Stopping an import
- Restarting an import
- Viewing the Import Message Log
- Removing an import profile
- Including and excluding target forms

Prerequisites

Before you can use the import functionality, The Solution Series must be installed, you must have the access to the data to be imported, and you must be familiar with the system's forms.

Questions answered

The following questions are answered in this section:

1. What tools can be used to export data?
2. What is the Import Profile Manager and what purpose does it serve?
3. What functions are provided by the Import wizard?
4. What control options are available for the import process?

The export process

Cyborg provides several tools to help you extract and report on information about your organization, employees, benefits, and payroll. These tools are suited for different purposes, and you will achieve the best results by using the tool that suits your extract requirement.

Options for obtaining extract data include:

- Reporting Administration
- Using ISQL or another tool to query a relational database implementation of the system
- Packaged reporting
- Solution View (create an extract)

Reporting Administration

Using Reporting Administration functionality is the easiest way to manipulate data. As delivered, Reporting Administration provides a means of extracting a great deal of information from the administrative solutions. By reviewing the data that is already delivered, you may determine that the data you want to extract is already defined. Then the task of manipulating data and importing it back into your system could be as simple as creating an Impromptu report, saving its content in comma delimited format, altering the data, and using the Import feature to apply the manipulated data. If this is the case, you need to verify that a fresh extraction has been performed before creating your Impromptu report.

☞ *Refer to the Reporting Administration Data Mart Data Model and/or the Catalog to Field cross reference spreadsheet delivered with Reporting Administration to determine if the data you want to manipulate is already defined in Reporting Administration.*

If the data you want to manipulate is defined in Reporting Administration, but you do not want to perform a full extraction of all defined data, you can define a separate data mart and perform a mini extraction. This course of action requires database administrative skills. To learn how to do this, attend the Customizing Reporting Administration class offered by Cyborg.

If the data you want to manipulate is not defined in Reporting Administration, but you want to use the functionality of this reporting tool, you must create additional extract programs, either customize the data mart or create a new data mart, and customize the delivered catalogs or create new/additional catalogs. This course of action requires Cyborg Scripting Language skills and database administrative skills. To learn how to do this, attend the Customizing Reporting Administration class offered by Cyborg.

Note: You will be able to do an extract only if your organization is licensed to use Administration. The full process requires additional software elements. The specific data elements represented in the extract are detailed in the Reporting Administration Data Mart Data Model documentation.

See also:

- Creating a data extract using Reporting Administration ***(on page 233)***

For detailed instructions for creating a data extract.

ISQL or another tool

If you have a relational system, you can use ISQL or another tool to run queries directly from the relational tables of your system. You can then save the query content in comma delimited format, alter the data, and use the Import feature to reload in the manipulated data.

This is only an option for the most technical users who have detailed knowledge of the data format and table definitions within the relational version of the system.

Packaged reporting

Cyborg delivers hundreds of reports that have been developed using the Cyborg Scripting Language. You can use these reports in their delivered form or customize them to report on specific data.

You can also use Cyborg Scripting Language to create your own program that could be run offline to extract data.

Once the data is extracted and formatted in delimited files, you can manipulate the data and use the Import feature to apply the manipulated data.

☞ *Refer to the Cyborg Scripting Language documentation for details on how to customize and create packaged reports.*

Solution View

Solution View is a delivered tool for developing forms, fields, on-request queries, extracts, and reports. Solution View consists of two main components:

- Query Writer—to write programs that are run online by the QUERY program
- Report Writer—to write programs that are run in batch

The Report Writer in Solution View can be used to create an extract file from your data. After the data is extracted and formatted in delimited files, you can manipulate the data and use the Import feature to apply the manipulated data.

☞ *Refer to the Using Solution View documentation for details on how to create an extract file.*

The extract data

Regardless of the method used to extract the data, the report or file must be converted to a delimited file or placed in an Excel spreadsheet to create the import file. This file is the one used by the Import functionality to update company and employee information.

Apply the Concept
Based on your understanding of the export options as explained in this concept, which one or more of the solutions will best suit the needs of your organization?

The import process

The import process moves data from an external source to any company or employee form. All you need is the authority to access the import data file.

The import feature is not a replacement for the Batch Transaction Layout function, which is a batch-only program that produces a report showing batch transaction layouts for application form entries. The report is called the Batch Layout Report (BATCHL). It contains form-specific literals, field information, and comments associated with the entry fields. The Batch Layout Report (BATCHL) can be very helpful when you design conversion and/or interface programs. This feature is specifically suitable for high volume movement of data for installation, conversion, and maintenance purposes.

What is an import profile

An import profile sets up the relationship between the import data and the form to which it will be imported, and is independent of the actual data. Import profiles are specific to each user. Once created, an import profile can be used for multiple imports from different data files, provided the same columns of data still exist.

To create an import profile, you must already have an import file that contains data that can be used to populate the system's forms. You will then select the form on which the import data will be recorded, and specify a one-to-one mapping of import data items to form data items. You also have the option of specifying a header record in the import data file, as well as the file delimiters and text qualifier that were used in the import data file.

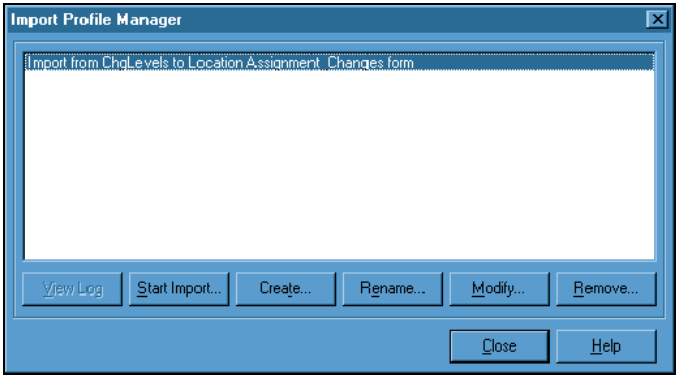
After import profiles are established, they can be shared by copying the local files from one PC to another. It is not possible to store import profiles on the server.

What is the import process

After an import profile is set up, the import process can be started. After you specify how the import will handle errors and whether the import records will generate communication events, field validation takes place. You may stop the import and correct the errors. When all the fields validate with no errors, the posting of import data begins. When all the data has been recorded in your system, you may view an Import Message Log that provides error and warning information, as well as import record totals.

The Import Profile Manager

The Import Profile Manager is the tool that allows you to easily create, modify, rename, and remove an import profile, as well as start the import and view the resulting message log. You may use the Import Profile Manager if you have been given access on your user profile or if you are the Security Officer.



The Create or Modify options on the Import Profile Manager launch the Import Creation and Amendment wizard. This wizard guides you, step by step, through the tasks and options necessary to create or modify an import profile.

Import data sources

The Import Profile Manager is used to import data on a form by form basis. For instance, a department manager may use spreadsheet software to calculate and manipulate staff position and salary information. After this is done, and the new salary budget has been approved, the spreadsheet data can be imported into your system. The manager can apply the data to as many forms as required, one at a time.

Import data can be extracted from any source, including the administrative solutions.

Allowable import files

You can use a Microsoft Excel 97 (or higher version) spreadsheet to calculate and manipulate information. That data can then be applied to one or more system form.

You may also use any extracted application data that can be saved as a delimited file.

General import data file rules

Whether you import a file that has been created using an Excel spreadsheet, or an extracted application file, you must ensure that you understand what will occur when you import data to an employee's record.

It is a common practice to select the Clear Fields menu option to blank out the existing data on a form before keying new data. This prevents any copying of information from the prior occurrence if it does not apply to the new segment. If the employee record to which you are going to import data already has a form with existing data, any field that is not applied by the import will retain its prior value. Import does not blank out fields to which data is not imported.

To clear a Cyborg field, a hash symbol (#) or a 'none' selection in an option list must be used in the Import data file cell or keyed directly into the form field during the mapping process. This is the recommended method of blanking out existing information in fields that will not be mapped to a form in the Import Profile.

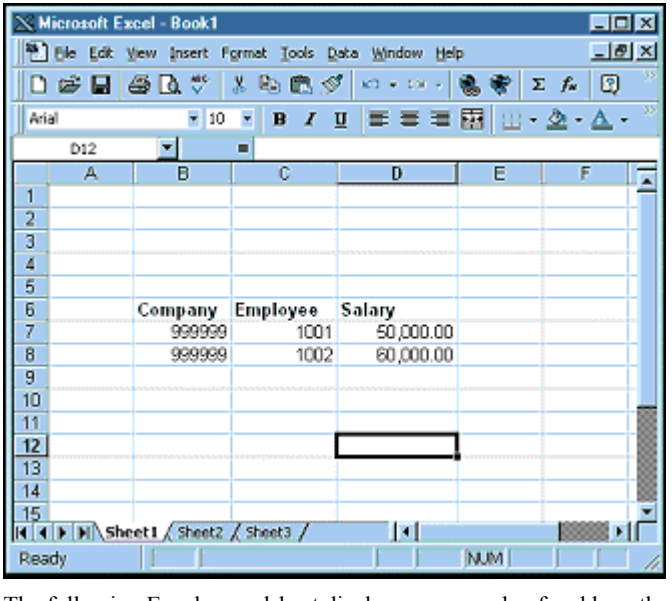
Excel spreadsheet rules

If data is being imported from an Excel spreadsheet, it is important that the following assumptions are known and that the rules are followed to prevent the accidental import of invalid data:

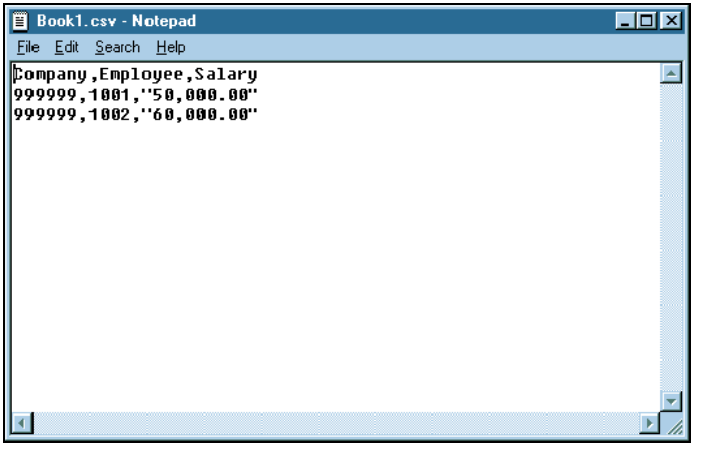
- The spreadsheet data must be contained within 'sheet1'.
- The import process saves the file in a comma-delimited format that automatically ranges the data from the first and last used rows and columns. Leading and trailing blank columns and rows are ignored. Any blank rows or columns that appear in the ranged part of the spreadsheet are saved. When an import is processed and an empty row is encountered within the ranged part of the spreadsheet, the following rows are ignored.
- If the 'First record is a heading' check box is activated in Step 5 of the import setup wizard, it is assumed that the first row of data is the heading row. The import assumes only one heading row.
- Any total lines must be removed from the spreadsheet or pasted into a new sheet 1 before importing.

Note: An entry typed with leading zeros in an Excel spreadsheet will display without the leading zeros in the cell. If the field on the target form requires leading zeros, the entry in Excel must be preceded by a single quote ('005).

The following Excel spreadsheet displays an example of an original import file.



The following Excel spreadsheet displays an example of and how the imported file would be converted.



Delimited files

The second option for an import file is one that has been developed in another application and extracted for use as an import file. This type of file uses delimiters and text qualifiers to separate where one item of data ends and another begins.

The delimiter may be a comma, semicolon, space, tab, or other alphanumeric character of your choice.

If the use of a text qualifier is required to define items within a delimiter, it may be a double quote or single quote.

Apply the Concept
Based on your understanding of the import sources as explained in this concept, would your organization be able to import a tab-delimited file that has been supplied by an insurance company?

Target forms

You may easily import data into any form to which you have access, as defined by your user profile that has been set up by your Security Officer. If your profile allows access to only ten forms, then you will be able to import to those ten forms.

If your user profile allows display-only access to a form, you will not be able to update that form with import data.

Position Management fields may be the target of import data. Position information may be imported.

Forms that can not be used with the import function do not appear in the form browse during the import profile creation. If your organization wants to exclude import to specific forms, this can be done using the Browse Forms - Import option list (SC52). Forms in this option list can not be used as targets for the import function. This option list can also be used to include forms that are not employee or company forms, but should be used within import, such as time entry forms.

☞ *Refer to* **Maintaining Option Lists** *(on page 27) for information about using the Option List Editor (CSUPDT) and displaying option lists.*

See also:

- Including and excluding target forms ***(on page 252)***

For detailed instructions for including and excluding target forms.

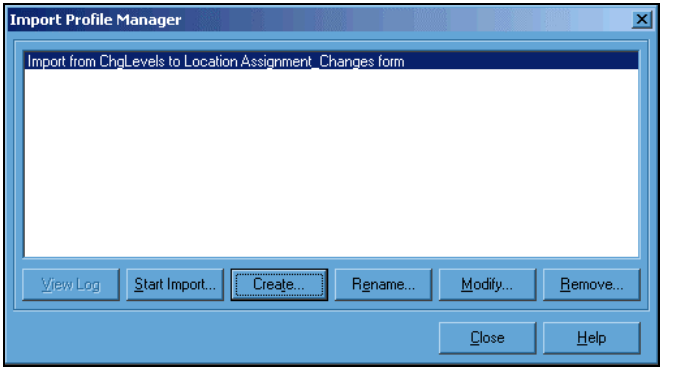
The Import wizard

The Import Creation and Amendment wizard provides you with an easy method of setting parameters for importing data into your system. The wizard takes you through the creation of the import profile that is required prior to processing the import.

The wizard allows the setup of parameters for one form at a time. If you need to import data into more than one form, run the wizard one time for each form. Then run the import program one time for each form for which you have created an import profile.

Navigating the Import wizard

The Import Creation and Amendment wizard is activated by selecting Create from the Import Profile Manager, as shown in the following dialog:



There are four buttons that you can use to navigate through the Import wizard:

- Back—Moves you backwards one step
- Next—Moves you forward one step
- Cancel—Exits the wizard and returns you to the Import Profile Manager
- Help—Displays online information about the wizard

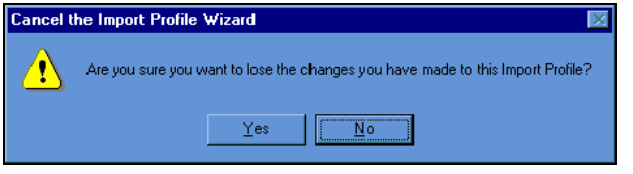
When appropriate, the Next button is replaced by a Finish button. The import profile is not created until you click Finish. Until you do so, you will be able to use the Back and Next buttons to move back and forth between the steps and make changes before the profile is actually created.

Wizard overview

The wizard guides you through the completion of the profile creation. The import profile must be set up prior to processing the import. The following tasks are included in the setup of an import profile:

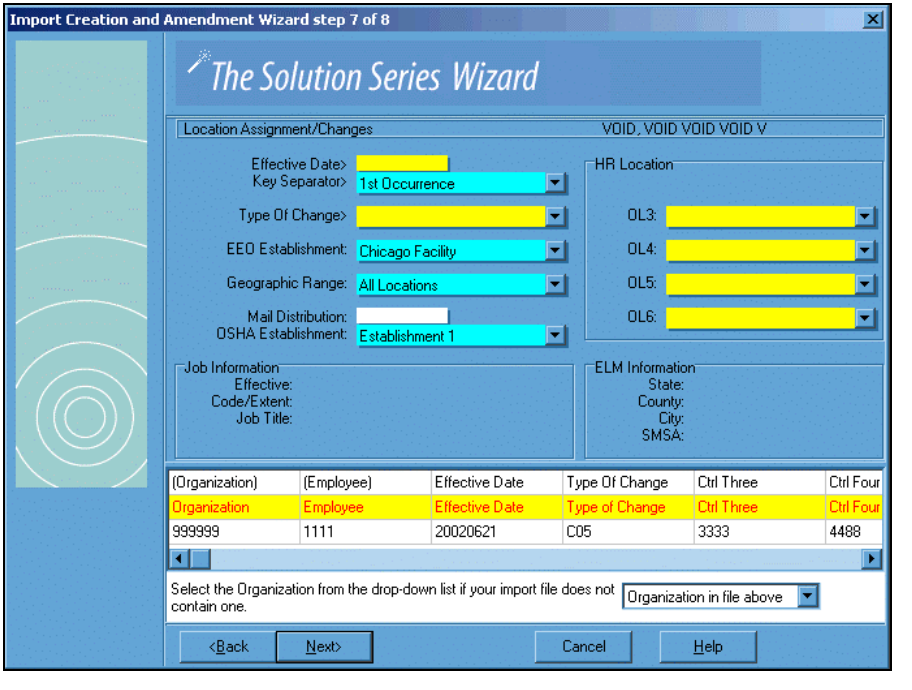
- Select the target form
- Specify the import data file
- Select import file delimiters and text qualifier (if not an Excel file)
- Specify if a header record is included in the import data file
- Map the relationship between the import data items and the form data items

If, at any time during the wizard process, you select 'Cancel', the following dialog is displayed:



File-to-form relationships

You will use the form and import data that displays in Step 7 of the Import wizard to map, or link, the data from the import file to the destination form. The form uses the currently displayed organization's Logical Employee Model as the employee for the form. The form area may only be used for mapping purposes. While you are processing Step 7, you will be prevented from linking to other forms, viewing history records, and saving the form.



Default values

If some of the form data is the same for all employees, you may choose to exclude that data from the import file and enter it directly on the form during the mapping process. Default values can be entered directly on the form, in exactly the same way that data would be recorded. Entries made directly on the form apply to all employees in the import.

To clear an existing Cyborg field on the target form, a hash symbol (#) must be keyed directly into the form field. This is the recommended method of blanking out existing information in fields that will not be mapped to a form in the Import Profile.

Use of a variable date

As an alternative to entering a default date within a date field or mapping to a column in the data, you can also type the word 'Today' or the letter 'T'. This causes the current date to be used when the import occurs. These entries are not case-sensitive.

Days can also be added or subtracted from today's date by entering 'T+n' or 'T-n' (where n is a number in the range of 1 to 99). As an abbreviation for the fuller statement, the entry '-n' or '+n' can be entered. This is useful if the same import is to be used repeatedly. This option will also be available as a context sensitive item on the form (right-click on the date text box).

Effect of organization assumption

Because the wizard relies on its ability to display the form for a specific Logical Employee Model, the following logic is applied when a target form is selected. This logic will ensure that the form can be called:

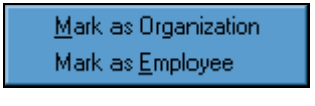
- Logical Employee Model '00' will be called for the currently selected Organization.
- If the Logical Employee Model '00' does not exist, the LMODEL option list (SC42Y) will be examined, and the first Logical Employee Model number for the Organization will be used.
- If this fails, an error message is presented.

Mapping methods

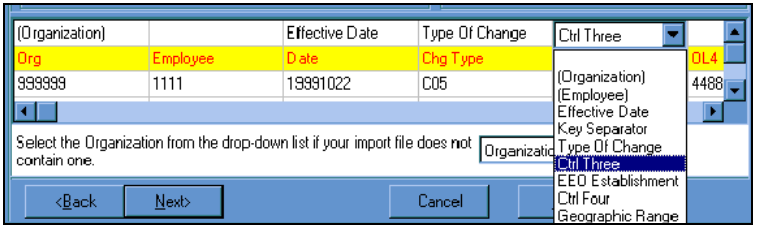
Fields may be mapped, or linked, from the import data to the form data by one of two methods:

- Selecting the field name from the drop-down list at the top of the import data column
- Dragging and dropping an import data column onto the field to which it will be mapped

Right-clicking on a grid column allows a column to be assigned to an Organization or Employee:



If you use the method of selecting the field name from the drop down list at the top of the data column, each form field name displays in the drop down list. As shown in the following illustration, a blank value also exists in the drop-down list to allow the removal of values if an error is made:



Alternatively, you may drag a column and drop it onto the field to which it is to be mapped. As this is done, the top row of the column is updated to reflect the field name.

Each column of data can only be mapped to a single data field on the form. All key fields on the displayed form must be mapped or manually entered. If the Next button is selected before all of the key values have been mapped or manually entered, an error message is presented.

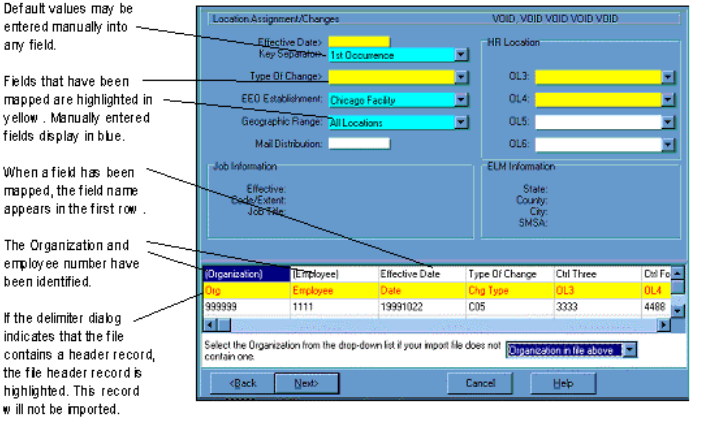
The Import Wizard will try to automatically match the Organization. If the Organization has been mapped from the import file, the Organization list will be set to 'Organization in the file above'. If an Organization is selected from the list, any column mapped to the Organization is cleared.

When mapping to a list box, either the description or the code can be mapped to the option list. During the import, the system will scan both for a match. If the same value is matched in the code and description during the import, the code will be used.

Import data for option buttons must match the option button caption or code. For example, for the Sex option button, the import data must be M, F, Male, or Female. You may use the selection method or the drag-and-drop method for mapping to an option button group.

If a column is dragged to a field that already has a mapping, the old mapping is removed and the new mapping takes its place. If a field is already manually entered, and then a column is dragged to it, the manual entry is cleared.

If you indicated in Step 5 of the wizard that the first row of import data was a header record, then the header information is highlighted in the display in Step 7. This record is not processed by the import.



Field color changes

Action	Color of field
Mapping is done by selecting a field from the drop-down list or by dragging the column to a field	Yellow to indicate that the field has been mapped
Manual entry is made in a field on the form	Blue to indicate that the value in the field will be defaulted to all records generated by the import
Field is manually entered, and then a column of import data is dragged to it	Blue changes to yellow after manual entry is cleared
Column of data is mapped to option buttons	Yellow in all of the buttons to indicate that a mapping has taken place
Manual entry is made in an option button group	Blue in all of the buttons, and the button selected will display a black selected mark

Removal of mapped fields

Two methods are available for removing mapped fields if an error is made:

- Select the blank value in the import column option list.
- Right-click the field on the form and click the Remove Link option on the resulting dialog to remove the mapping.

See also:

- Creating an import profile ***(on page 234)***

For detailed instructions for creating an import profile.

Apply the Concept

Based on your understanding of the Import wizard as explained in this concept, how would you determine by looking at the display in Step 7 that all of the desired import items have been mapped to the target form?

Import profile conventions and maintenance

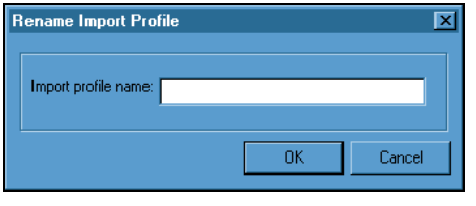
As your business needs change, you may need to maintain the import profiles that simplify your everyday tasks. You can rename, modify, and remove import profiles.

Import profile naming conventions

The name of the profile is derived from the input file name and the form name. Any illegal characters that may occur in the file name, such as '/', are replaced by an underscore, as shown in the following example:

> If the import file name is *review 1999.xls*
> and the form is *Salary Assignment/Changes,*
> then the import profile will be titled *Import from review 1999 to Salary Assignment_Changes form*.

You may change an import profile name if necessary. The Import Profile Manager provides a Rename option that allows you to see the existing name and make any changes. The resulting Rename Import Profile dialog displays the current name and allows you to change it to any other value of up to 100 alphanumeric characters:



If the name that is automatically generated, or entered manually using the Rename Import Profile dialog, is not unique, the system will add a sequence number to the end of the name. For example:

- Import from review 1999 to Salary Assignment_Changes form
- Import from review 1999 to Salary Assignment_Changes form (1)
- Import from review 1999 to Salary Assignment_Changes form (2)

See also:

- Renaming an import profile ***(on page 244)***

For detailed instructions for renaming import profiles.

Import profile storage

When the final step of the Import wizard has been completed, the import profile is saved as a .IMP file on your local PC. It is stored in the following path and location:

```
<Install Directory>\Environments\<Environment Name>\Imports
```

You can view a list of existing import profiles by displaying the Import Profile Manager dialog or by using Windows Explorer to search for all files with an extension of .IMP.

Import profile copies

Because import profiles are stored on your local PC, other users can not access them or run imports using their parameters. However, you may share import profiles by copying the .imp file to a diskette or CD-ROM, or attaching the file to an email. The import data file may also need to be made available to the user, if the same import data is to be used or modified. Alternatively, a template of the import data file can be provided and used with new import data.

Import profile modification and removal

The Modify option on the Import Profile Manager dialog allows you to use the wizard to modify any of your existing import profiles. The profile data that you previously entered will be displayed and you may make any changes that are required.

Import profiles may also be removed by highlighting a specific profile and then selecting the Remove option on the Import Profile Manager. A Remove Import Profile dialog is displayed that allows you to verify your intention to remove the profile.

See also:

- Modifying an import profile ***(on page 244)***

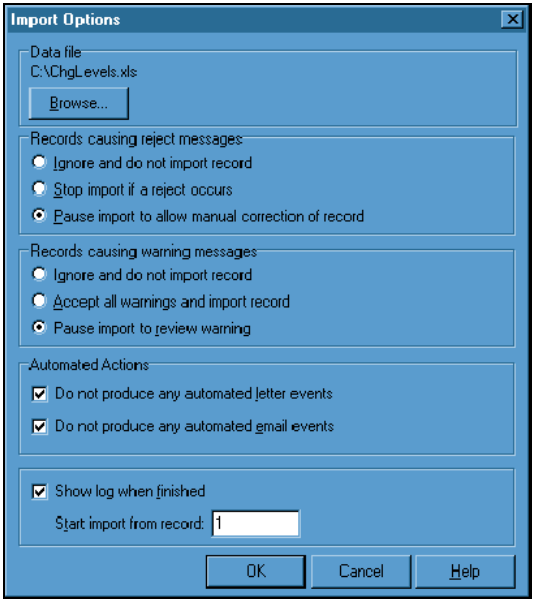
For detailed instructions for modifying import profiles.

- Removing an import profile ***(on page 251)***

For detailed instructions for restarting import record processing.

Control options for importing data

After an import file on the Import Profile Manager has been selected and the Start Import button has been clicked, you can specify how the import handles errors and specify automated options by making selections on the Import Options dialog. After this dialog is completed, the pre-import validation begins.



Change import files

A Browse button provides the opportunity to change import files prior to beginning the import process. The changed file must have the same column structure as the original. File. This could be used if you created your field mappings from a dated import file and want to substitute current data at the time of import. For instance, the original import file might be 'JanuaryBudget.xls' and you want to run the 'FebruaryBudget.xls' file in the current Import run. Also, if an import file is shared (the .IMP file copied from one PC to another), you may need to reference a different import file.

Automated options and error handling

Depending on the number of records being processed by the import, you may choose to handle rejects and warnings in different ways.

Records causing reject and warning messages

For rejects, you may choose one of the following actions:

- Ignore and do not import the record
- Stop import if a reject occurs
- Pause import to allow manual correction of record

Note: Pausing the import for each reject may not be advisable when a large number of import records are being processed.

You may choose one of the following options for handling warnings:

- Ignore and do not import record
- Accept all warnings and import record
- Pause import to review warning

Automated actions

When the import is run and forms are updated, all communication events related to the form will occur unless the special defaults on the Import Options dialog are activated.

If the 'Do not produce' options are not activated, all letters produced by the form generation during the import are queued. If letter events are triggered, you will be able to view or print them after the import has finished.

Depending on the number of import records, a large number of communication events may be triggered. Consider the effect of large volumes of emails and letters on your network environment.

Emails are sent without the option to receive a preview dialog. If multiple recipients are found for a position, the email is sent to all of them. If emails are triggered, it may cause the email system to request an email password. This suspends the import process until the password is entered.

Import message log

After an import is completed, a log file is produced. If you set the option on the Import Options dialog to display the log file when the import has been completed, then the file will be automatically opened in Microsoft Notepad or the application assigned to text files on the PC.

Alternatively, if you leave this option unselected, you may view the message log by selecting the View Log button on the Import Profile Manager dialog.

See also:

- Viewing the Import Message Log ***(on page 250)***

For detail directions for viewing the import message log.

Record starting point

In case you need to stop the import, or a network failure or power problem occurs while import is being processed, you have the option of restarting the import from a specific record. In a restart situation, the Import Options dialog defaults to the aborted record number. Alternatively, you may type the record number to be processed when you restart an import.

See also:

- Starting an import ***(on page 245)***

For detailed instructions for processing import records.

- Restarting an import ***(on page 248)***

For detailed instructions for restarting import record processing.

Apply the Concept

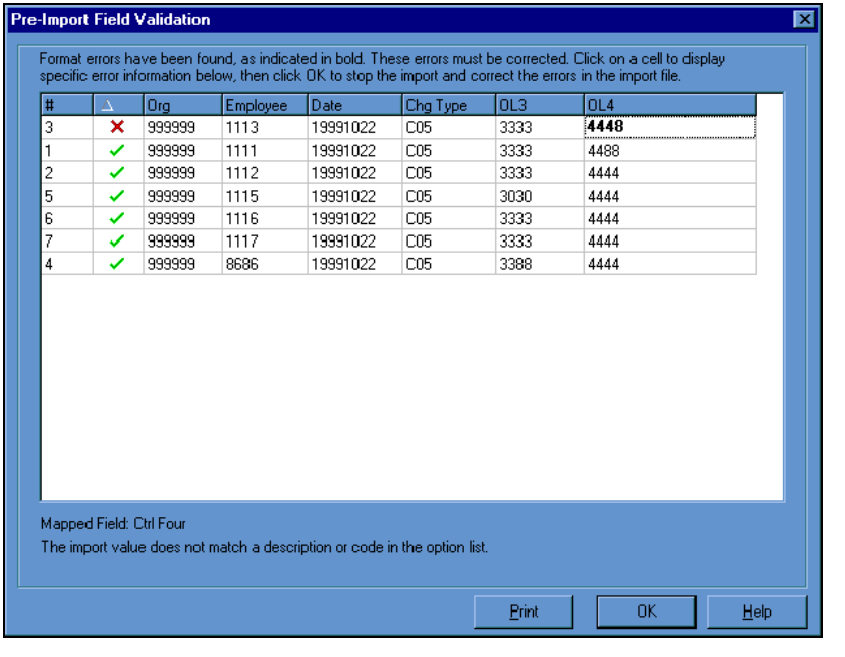
Based on your understanding of the import options as explained in this concept, which option would you choose for rejects and warnings if your organization was processing an import file that contained 75 records?

Pre-import validation

After the import options have been selected, field validation takes place. The following are some of the validation checks that are conducted before any records are actually imported:

1. The form must exist. If it does not, an error message is displayed and the process is stopped.
2. The import file must exist. If it does not, an error message is displayed and the process is stopped.
3. The import file must contain records. If it does not, an error message is displayed and the process is stopped.
4. The fields to be imported must be complete and in a valid format. For instance, a date field entry must be formatted correctly.

If field errors are found, the following Pre-Import Field Validation dialog is displayed:



Each record is displayed. Records that have errors display a cross (X) to the left and the field in error is in bold. Records without errors display a check to the left. Initially, all error records are sorted at the top. Clicking on any column heading cell will sort the data in the column.

If you select a cell with a validation error, a validation error message and the name of the mapped field will be displayed at the bottom of the dialog. The Print button may be used to print validation errors to the default printer in the following format:

Record Number	Mapped Field	Column Name or Number	Cell data	Error Message

The following validation messages will display at the bottom of the dialog when a cell in error is selected:

Error message	Explanation
Invalid Date	■ The number of days added or subtracted from Today's date can not exceed 99. ■ The import value is not a valid Cyborg date or Windows short date.
Invalid Number	■ The import value is too large for the numeric field. ■ The import value has too many decimal places for the numeric field. ■ The import value is not numeric.
Invalid Alphanumeric	■ The import value has too many characters for the alphanumeric field.
Invalid Name	■ The import value is not a valid Cyborg name; it does not have a comma followed by a space. ■ The import value has too many characters for the name field.
Invalid Option List Value	■ The import value does not match a description or code in the option list.
Invalid Position Administration Table Value	■ Can not locate the Position Administration control number for the Organization. ■ The import value does not match a description or code in the Position Administration table.
Invalid Check Box Type	■ The import value is not a valid Yes or No type.
Invalid Employee ID	■ The import value is not a valid Employee ID; it must have between one and ten characters.
Invalid Organization ID	■ The import value does not match a description or code in the Organization option list.
Invalid Time	■ The import value is not a valid time format. Use the format: HH:MM where HH is hours (00-23) and MM is minutes (00-59). ■ The import value for hours is invalid. Hours must be within the range of 00 to 23. ■ The import value for minutes is invalid. Minutes must be within the range of 00 to 59.
Invalid Option Button Value	■ The import value does not match the option button label or option list code.

Although this dialog displays the errors, it may not be used for error correction. You must make your corrections in the import file.

You may stop the import by clicking OK, allowing you the time you need to correct the errors. All errors must be corrected in the import file prior to continuing the import process. After the errors are corrected, the import process can be started again and the validation checks will be repeated.

If all fields validate with no errors, the import process begins.

See also:

- Starting an import ***(on page 245)***

For detailed instructions for processing import records.

- Restarting an import ***(on page 248)***

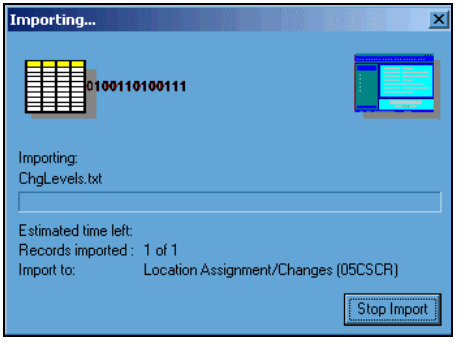
For detailed instructions for restarting import record processing.

Running the import

After the import options are entered, all the validation checks are performed, and all errors are corrected in the import file, the import of employee data can begin.

If the system identifies that the format of the import data has changed, an Invalid Import File dialog is displayed. A change to the import file may include such conditions as a mismatch in the number of data elements per record, for example, a mapped value in the import that no longer exists. The import stops and must be restarted after the error has been corrected.

While the import is in progress, the following dialog is displayed:



You may monitor this dialog to see the progress of the import run, or you may start another session of the system and perform other tasks while import is running. However, if you have chosen the option to pause the import process for errors, your attendance during the import run is required to address each error that is encountered.

See also:

- Starting an import ***(on page 245)***

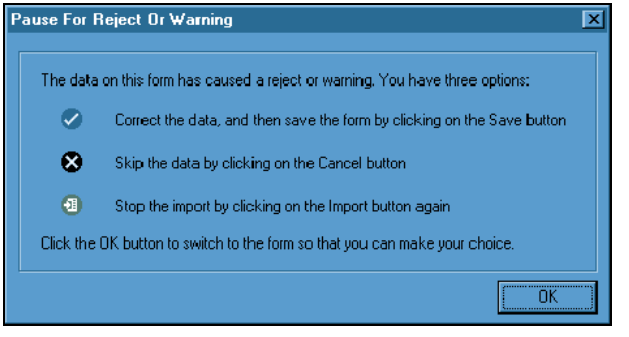
For detailed instructions for processing import records.

- Restarting an import ***(on page 248)***

For detailed instructions for restarting import record processing.

Import pauses for form rejects or warnings

If you selected either of the 'Pause the import' options on the Import Options dialog, the following dialog is displayed when an error occurs:

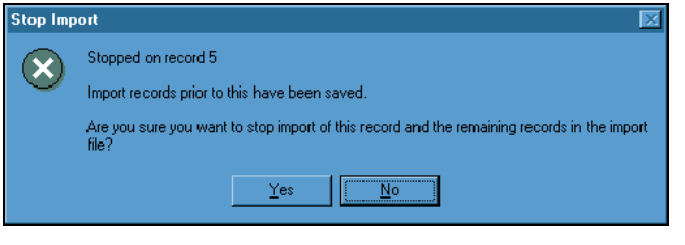


Three options are displayed in the dialog to address an error. After clicking OK on this dialog to switch to the form, you may perform one of the following actions by clicking the specified toolbar button:

- Save—Read the error message and then amend the data or accept the warning on the form being displayed; then click Save. The import continues.
- Cancel—Skip the data, bypassing the import record. No update is recorded; this record will be recorded in the log file as an uncorrected error. The import continues. Pressing Enter also cancels the record.
- Import—Stop the import (perhaps this error reveals a larger problem that must be resolved). The Stop Import dialog is then displayed with a Yes or No option.

Import interruptions

If, for any reason, you need to stop the import, you may do so by clicking the Stop Import button on the Importing dialog. As an alternative, you may click on the Import button on the toolbar, which changes to 'Stop Import' during an import. The following Stop Import dialog is displayed:



This dialog provides you with the information you will need when you restart the import. It also provides you with the alternative of continuing the import. The restart record number will also be recorded on the Import Options dialog and the Import message log if you choose to stop the import at this point.

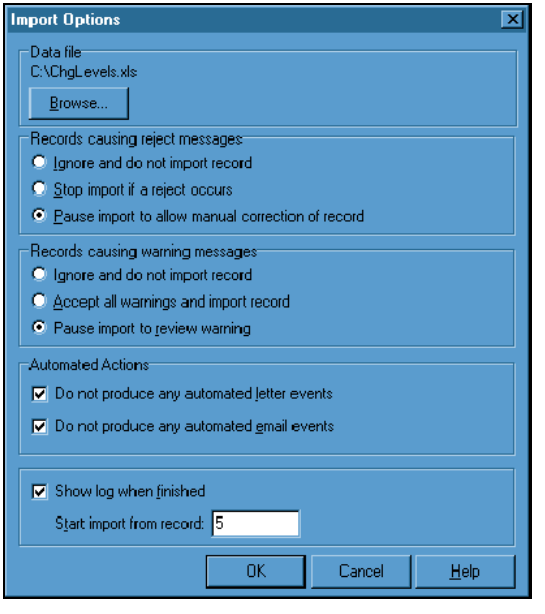
See also:

- Stopping an import ***(on page 248)***

For detailed instructions for stopping import record processing.

Import restarts

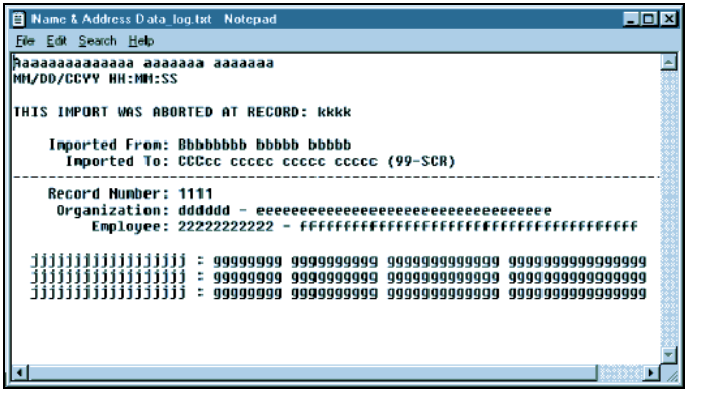
Using the information provided by the Stop Import dialog, you can restart the import from a specific record using the Import Options dialog:



Message log

If you set the option on the Import Options dialog to show a message log when the import has been completed, then the log file will be automatically opened in Microsoft Notepad or other text view assigned on the PC. Alternatively, you may return to the Import Profile Manager and select View Log.

The log contains error and warning information that is presented in the format shown in the following example:



The log text will be displayed as follows:

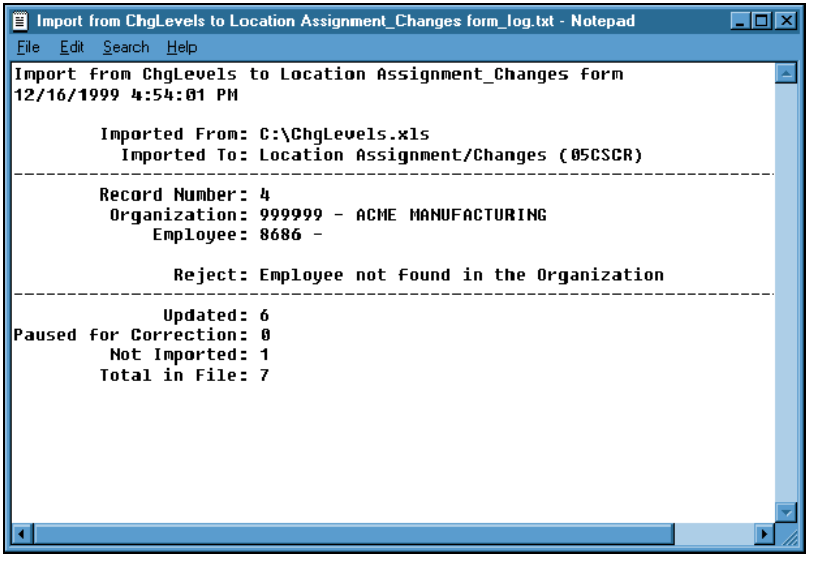
Aaa...	Import title
MM	Month
DD	Day
CCYY	Century and year
HH	Hours
MM	Minutes
SS	Seconds
kkkk	Aborted record number (if import aborted)
Bbb...	Import file name
CCCc...	Form name
99-SCR	Program number
1111	Record number of file
dddd	Organization number
eeeee	Organization name
222…	Employee number
ffff…	Employee name
jjjj...	Type of message (Reject, Ignored Message, or Accepted Message)
gggg...	Error message, with or without error numbers

Note: *The date format is derived from the local PC setting. The date is displayed in Windows short date format, defined in the regional settings control panel dialog.*

As well as Cyborg Scripting Language rejects and warnings, the following errors will also produce a reject message and be displayed on the log:

- 'Employee not found in the Organization'—when the employee can not be found
- 'Record Locked - Update Bypassed'—when another user is updating the employee record
- 'The import form does not contain any entry fields'—when the user has display-only security
- 'The form contains a different layout from when the import profile was created'—when the import profile is defined for a form that changed
- 'You are not authorized to access this employee'—when a security violation occurs

The following is an example of a message log file:



The last lines of the report display a record count for the following items:

- Updated—Records applied (including records that had warnings that were accepted)
- Paused for Correction—Records that had warnings or errors that were manually fixed or cancelled by the user
- Not Imported—Records not imported due to warnings or errors
- Total in File—Total records in the import file (excluding header record)

The message log file will have the same name as the profile but with a '_log.txt' suffix. Each time a new import is completed, the prior log is replaced with current message log information. The current log for each import is stored in the following path and location on your local PC:

```
<Install Directory>\Environments\<Environment Name>\Imports
```

Note: *If you renamed an import profile, the associated message log is not renamed. However, it can be viewed by accessing Windows Explorer and searching for the file under its original*

import profile name. If you want to keep additional log history, you may rename and relocate logs as they become available.

See also:

- Viewing the Import Message Log ***(on page 250)***

For detailed instructions for viewing the message log.

Apply the Concept

Based on your understanding of import run as explained in this concept, what control procedures would you implement to ensure that all import records are posted to your system?

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Completing the Guided Practice

The Wizard dialogs shown in the first task may not match your own data. They do, however, represent the resulting dialog in each wizard step.

An import file must be present on your local PC before starting the following detailed directions. It is suggested that you turn on the Office integration toolbar so you can access the Import Manager button.

Access the toolbar by making the following selections from the menus:

View ► Customize Toolbars

Then click the Toolbars tab, select Office integration, and click Close.

Creating a data extract using Reporting Administration

To create a data extract using Reporting Administration, follow these steps:

1. **Review the defined Reporting Administration data to see if it is already exported during a Administration extract process.**
2. **If yes:**
   Use Impromptu to create a sample report.
   Save the report as a comma delimited file.
3. **If no:**
   Attend the Customizing Reporting Administration training course to learn how to create your own data mart.

See also:

- The export process ***(on page 205)***

For more information about creating import profiles.

Creating an import profile

To create an import profile using the Import Creation and Amendment wizard, follow these steps:

1. Access the Import Profile Manager

Access this dialog by selecting the Import Manager icon from the toolbar:

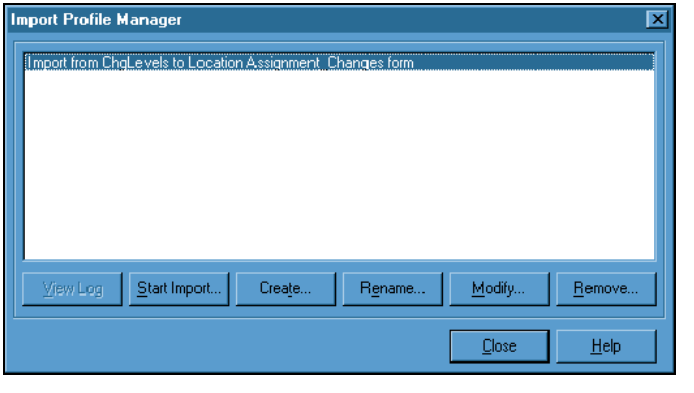
Alternatively, make the following selections from the menu:

Actions ▶ Office Integration ▶ Import

The Import Profile Manager dialog is displayed.

For practice, access the Import Profile Manager dialog.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



2. Select Create

Click Create to activate the Import Creation and Amendment wizard.

For practice, click Create.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:

Welcome (1 of 8)

This dialog displays a brief description of import profile's purpose—to define the relationship between the data in your file and the data on a form, for the organization currently being displayed.

3. Click Next

Click Next to continue creating an import profile.

For practice, click Next.

Choose form (2 of 8)

This dialog allows you to select the form currently being displayed or a form that you select by using a Browse button on the dialog.

4. Click Browse (optional)

If you want to import data to the form being displayed, you do not need to select a form. Skip to Step 7 of the detailed directions.

If the form being displayed is one that can not be used with the import functionality, then this dialog functions as if no form is displayed.

If the form displayed in the dialog is not the form to be selected for import, or if no form is being displayed, click Browse to view a list of available forms. This list contains only those forms you are authorized to access. Forms that can not be used with the import functionality are not displayed.

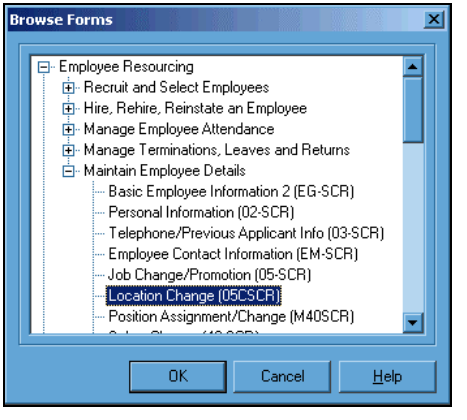
The Browse Form dialog is displayed.

For practice, click Browse.

5. Select a task

Fully expand the tree view in the same way that you would use the Navigator to locate a form. Highlight the task representing the form that is to receive the import data.

For practice, expand the menu tree until you can select the Location Assignment/Changes form (05CSCR).

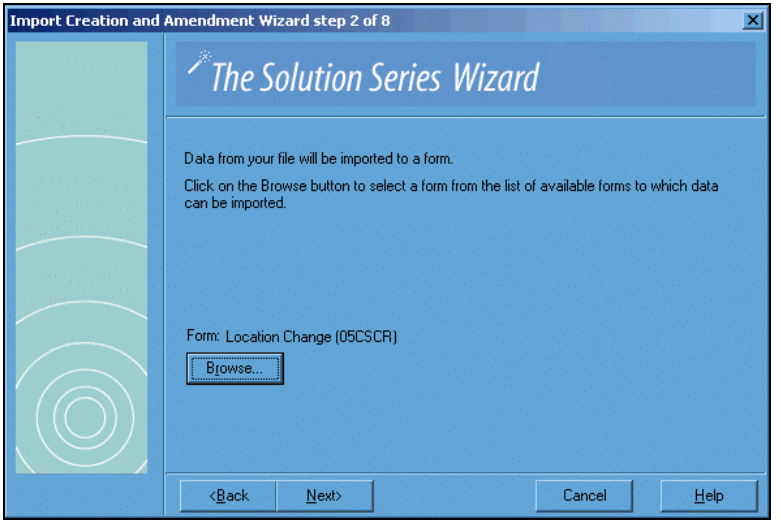


6. Click OK

Click OK to select the form. The form title and name are displayed on the Choose form dialog (2 of 8).

For practice, click OK.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



7. Click Next

Click Next to continue creating an import profile.

For practice, click Next.

Choose file (3 of 8)

This dialog provides a Browse button to select the import file to be used. The following file types display in the open file dialog:

File extension	File type	Note
.***	All files	
.TXT	Text files	
.XLS	Excel	Default file type Will not use Step 4 of 8
.XLT	Excel template	Will not use Step 4 of 8
.CSV	CSV comma delimited	Will not use Step 4 of 8

8. Click Browse

Click Browse to view the directory contents of your local PC.

For practice, click Browse.

9. Locate and select the import file

A standard Windows Open dialog is displayed, from which you can locate the import file. You may use the Windows Search feature to find the file by name or by extension. When you locate the file, highlight it.

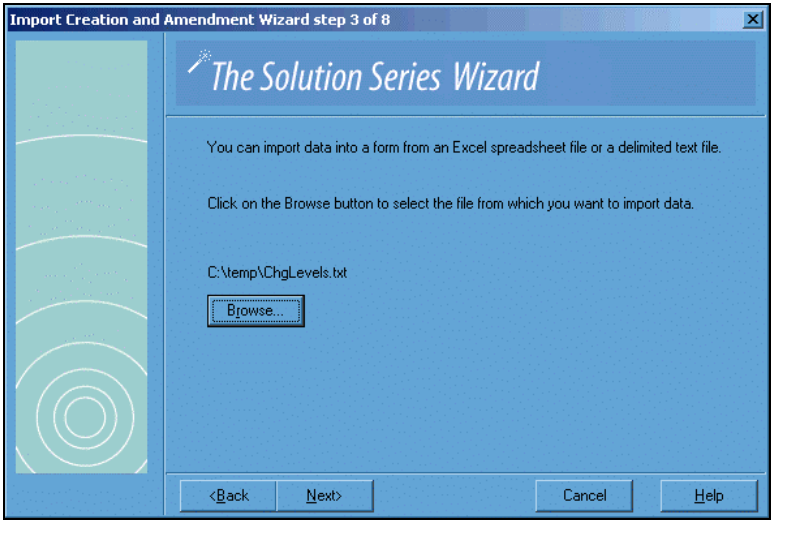
For practice, locate and highlight the import file for this import profile.

10. Click Open

Click Open to select the import file for this import profile. The file name is displayed in the Choose file dialog.

For practice, click Open.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



11. Click Next

Click Next to continue creating an import profile.

For practice, click Next.

Select delimiter (4 of 8)

This step is not shown if an Excel file is chosen or the file type defines the delimiter. This dialog lets you specify the delimiters and text qualifier (if any) used in your import file.

12. Select a delimiter and text qualifier (optional)

The delimiter, used to specify where one item of data ends and another begins, may be a comma, semicolon, space, tab, or other symbol of your choice. If you choose 'Other' and specify your own delimiter, the character can not be in the ranges a–z or 0–9.

The text qualifier, which acts as a separator within a delimited item, may be a double quote ("), single quote ('), or none.

For practice, if the import file is a non-Excel file, select a delimiter and a text qualifier (if any).

Header record (5 of 8)

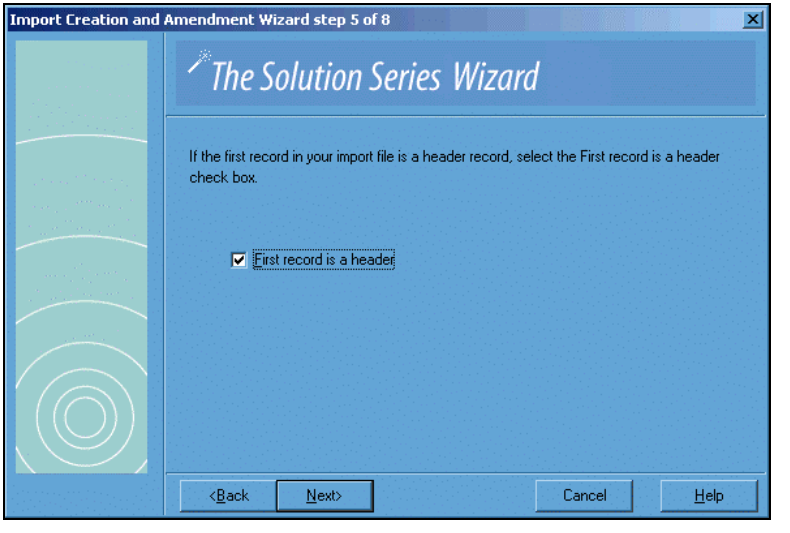
This dialog provides a check box to indicate whether or not the first record of the import file is a header.

13. Select the check box (optional)

If you specify that a header record is present in the import data file, the first line of data is identified as the header and subsequently not imported.

The input file must have at least two records, if one record is a header. If you wish to set up a dummy file to create import mapping, this rule must be followed. If no header is included, only one data record is required.

For practice, select the check box if the first import record is a header record.



14. Click Next

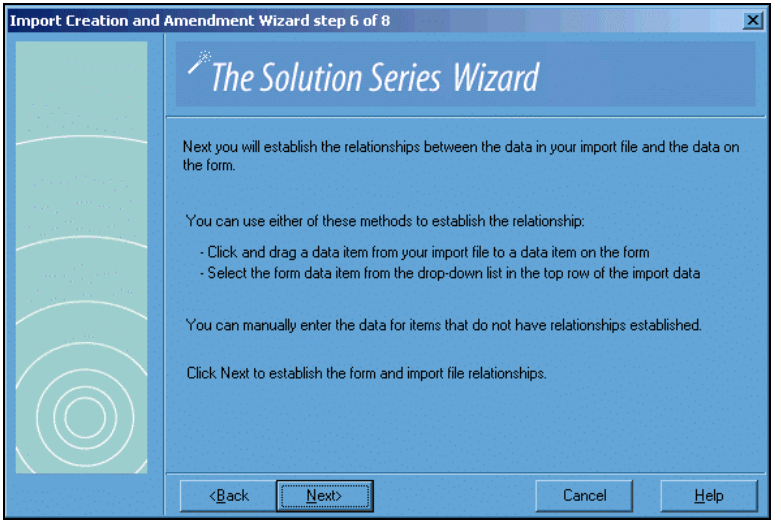
Click Next to continue creating an import profile.

For practice, click Next.

Map message (6 of 8)

This dialog displays an explanation of Step 7.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



15. Click Next

This is an information message only. In the next step, you will establish the relationships between the data in your import file and the data on the target form.

Click Next to continue creating an import profile.

For practice, click Next.

Form and fields (7 of 8)

You will use this dialog to establish the relationship between your import data items and the form data items, as well as indicate whether or not the import file contains Organization information.

16. Map the import-to-form relationship

This dialog allows you to view the target form as part of the wizard dialog and view the first lines of the import file below it. All key fields on the displayed form must be mapped or manually entered. Use one of the following methods to complete the mapping:

- Select the field name from the drop-down list at the top of the import data column by clicking the column header.
- Drag and drop an import column onto the field to which it will be mapped.
- Make an entry directly into a form field. This entry will be applied to all records that are updated by the import file.

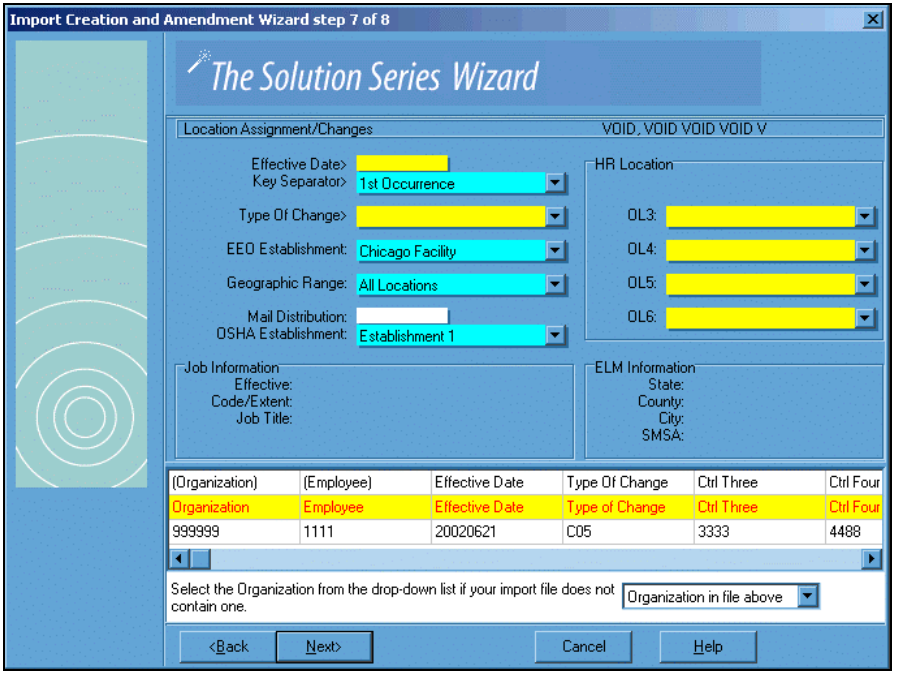
Note: Clicking at the top of a partially displayed column will scroll the grid to the right. A second click will display the drop-down field list.

To remove a mapped field, use one of these methods:

- Select the blank value in the import column option list.
- Right-click the field on the form to remove its mapping.

For practice, map or manually enter all required fields.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



17. Click Next

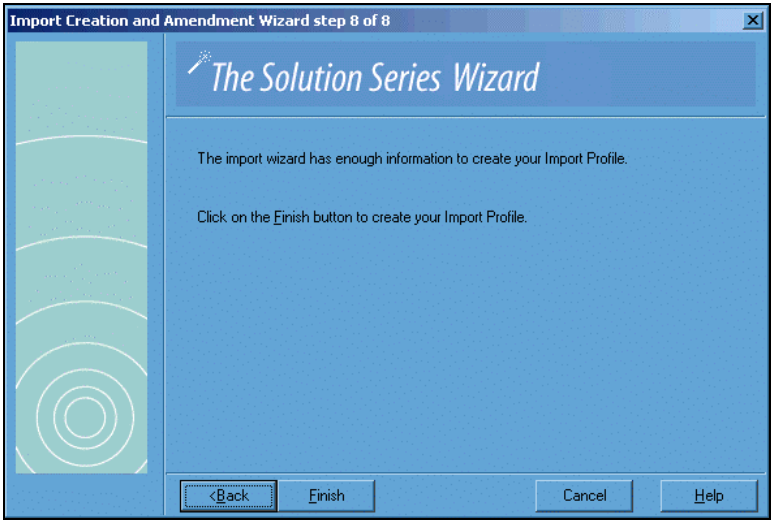
Click Next to continue creating an import profile.

For practice, click Next.

Summary information (8 of 8)

This dialog confirms that the necessary steps for creating an import profile have been completed.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



18. Click Finish

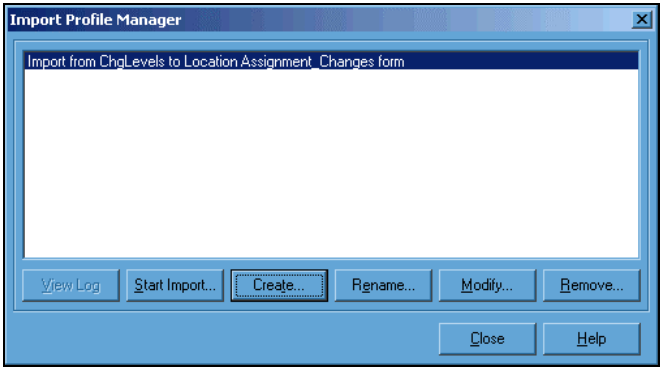
Click Finish to create your import profile.

After you click the Finish button, the import profile name is assigned and the import profile is saved on your PC. At this point, you have only a profile—no import has taken place.

The Import Profile Manager dialog is displayed, showing the import profile name.

Note: *After import profiles are established, they can be shared by copying the local files from one PC to another. It is not possible to store import profiles on the server.*

For practice, click Finish. The Import Manager dialog will display:



See also:

- The Import wizard ***(on page 14)***

For more information about creating import profiles.

Renaming an import profile

To rename an import profile using the Import Profile Manager, follow these steps:

1. Access the Import Profile Manager

Access this dialog by selecting the Import Manager icon from the toolbar:

Alternatively, make the following selections from the menu:

Actions ▶ Office Integration ▶ Import

The Import Profile Manager dialog is displayed.

For practice, access the Import Profile Manager dialog.

2. Select the import profile to be renamed

From the list of existing import profiles, highlight the one to be renamed.

For practice, select an existing import profile.

3. Select Rename

Click Rename to display the Rename Import Profile dialog.

For practice, click Rename.

4. Type the new profile name

Use up to 100 alphanumeric characters to rename the import profile.

For practice, type the new profile name.

5. Click OK

Click OK to rename the import profile and return to the Import Profile Manager dialog. The file is displayed with the revised name.

For practice, click OK.

See also:

- The Import wizard ***(on page 14)***

For more information about renaming import profiles.

Modifying an import profile

To modify an import profile using the Import Profile Manager, follow these steps:

1. Access the Import Profile Manager

Access this dialog by selecting the Import Manager icon from the toolbar:

Alternatively, make the following selections from the menu:

Actions ▶ Office Integration ▶ Import

The Import Profile Manager dialog is displayed.

For practice, access the Import Profile Manager dialog.

2. Select the import profile to be modified

From the list of existing import profiles, highlight the one to be modified.

For practice, select an existing import profile.

3. Select Modify

Click Modify to activate the Import Creation and Amendment wizard.

For practice, click Modify.

4. Change the required entries

All steps of the wizard are displayed with the import profile's current entries. Make changes to the information as needed.

For practice, make changes to the profile information.

5. Click Finish

Click Finish on the last step of the wizard to save the import profile changes.

For practice, click Finish.

See also:

- The Import wizard ***(on page 14)***

For more information about modifying import profiles.

Starting an import

To start an import using the Import Profile Manager dialog, follow these steps:

1. Access the Import Profile Manager dialog

Access this dialog by selecting the Import Manager icon from the toolbar:

Alternatively, make the following selections from the menu:

Actions ▶ Office Integration ▶ Import

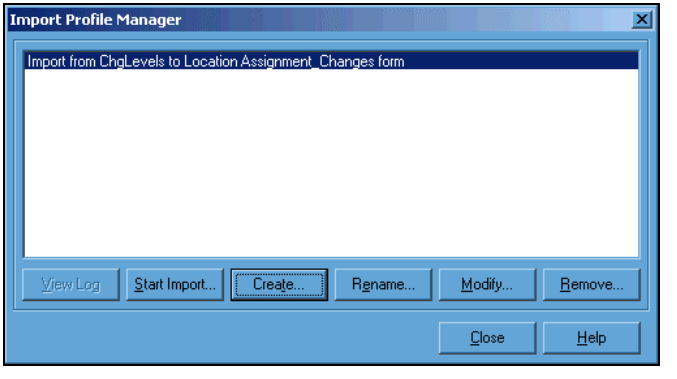
The Import Profile Manager dialog is displayed.

For practice, access the Import Profile Manager dialog.

2. Select the import profile to be run

From the list of existing import profiles, highlight the one to be run.

For practice, select an existing import profile.



3. Select Start Import

Click Start Import to start the data import. The Import Options dialog is displayed.

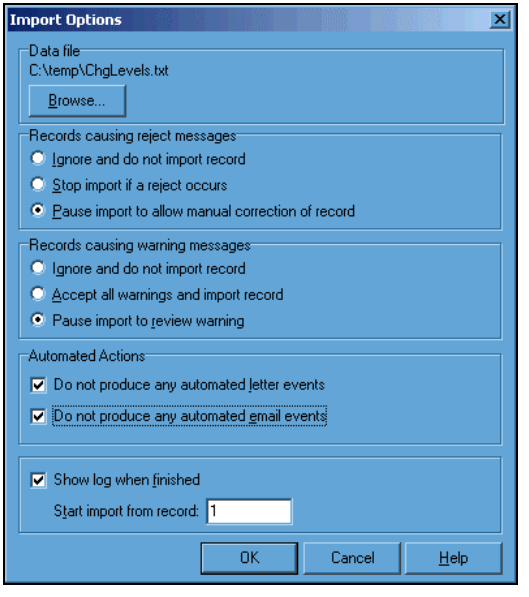
For practice, click Start Import.

4. Select import options

This dialog allows you to specify how the import will handle errors and automated options.

- Select an alternate import file using the Browse option. (Optional)
- Choose an option for handling records that cause reject messages.
- Choose an option for handling records that cause warning messages.
- Choose to produce or not produce automated letters and emails.
- Select the check box to view the message log after the import is finished.
- Alter the starting record number (used mainly under restart conditions; should remain at '1' for a normal import run).

For practice, select the preferred import options.



5. Click OK

Click OK to continue the import.

Pre-import validation takes place and a dialog is displayed. If there are any format errors, the import will stop so you can correct the errors. No import data has been posted to the system at this point. You must then restart the import from record 1.

If no format errors are encountered, the posting of import records to the system begins.

The Importing dialog is displayed while the import is active.

If, at any time, you need to stop the import, you may do so by clicking the Stop Import button on the Importing dialog or the Import button on the toolbar.

If you set the option on the Import Options dialog to show a message log when the import has been completed, then the log file will be automatically opened in Microsoft Notepad or the application assigned to text files on the PC. Alternatively, you may return to the Import Profile Manager and select View Log.

For practice, click OK.

See also:

- Control options for importing data ***(on page 221)***

For more information about handling import record errors.

- Pre-import validation ***(on page 224)***

For more information about error detection prior to posting import records.

- Running the import ***(on page 227)***

For more information about processing import records.

Stopping an import

To complete the Guided Practice for this task, you must start an import process by following the steps in the task ***Starting an import*** (on page 245).

To stop the processing of import data after the import process is running, follow these steps:

1. Click Stop Import on the Importing dialog

Click Stop Import on the Importing dialog while the import is being processed.

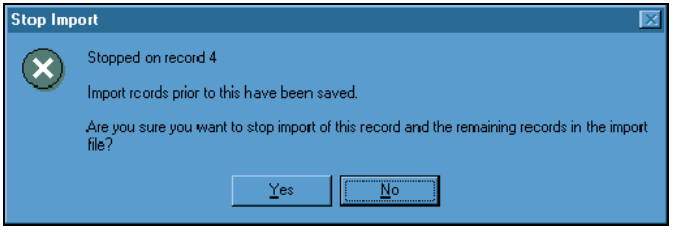
Alternatively, click the Import button on the toolbar to stop the import.

The Stop Import dialog is displayed and provides you with the record number of the last data to be processed before the import was stopped.

For practice, click Stop Import.

2. Click Yes

A No response to the 'Are you sure' statement on the Stop Import dialog allows the import to resume its processing. Clicking Yes stops the import.



For practice, click Yes.

See also:

- Running the import ***(on page 227)***

For more information about interrupting an import run.

Restarting an import

To restart an import using the Import Profile Manager dialog, follow these steps:

1. Access the Import Profile Manager dialog

Access this dialog by selecting the Import Manager icon from the toolbar:

Alternatively, make the following selections from the menu:

Actions ▶ Office Integration ▶ Import

The Import Profile Manager dialog is displayed.

For practice, access the Import Profile Manager dialog.

2. Select the import profile to be restarted

From the list of existing import profiles, highlight the one to be restarted.

For practice, select an existing import profile.

3. Select Start Import

Click Start Import to start the data import. The Import Options dialog is displayed.

For practice, click Start Import.

4. Select import options

This dialog allows you to specify how the import will handle errors and automated options:

- Select an alternate import file using the Browse option. (Optional)
- Choose an option for handling records causing reject messages.
- Choose an option for handling records causing warning messages.
- Choose to produce or not produce automated letters and emails.
- Select the check box to view the message log after the import is finished.
- Verify the starting record number (updated when the last import was stopped and now displays the next record to be processed on a restart).

For practice, select the preferred import options.

5. Click OK

Click OK to continue the import.

Pre-import validation takes place and a dialog is displayed. If there are any format errors to be corrected, the import will stop so you can correct the errors. No import data has been posted to the system at this point. You must then restart the import.

If no format errors are encountered, the posting of import records to the system begins.

The Importing dialog is displayed while the import is active.

If, at any time, you need to stop the import, you may do so by clicking the Stop Import button on the Importing dialog or the Import button on the toolbar.

If you set the option on the Import Options dialog to show a message log when the import has been completed, then the log file will be automatically opened in Microsoft Notepad or the application assigned to text files on the PC. Alternatively, you may return to the Import Profile Manager and select View Log.

For practice, click OK.

See also:

- Control options for importing data ***(on page 221)***

For more information about handling import record errors.

- Pre-import validation ***(on page 224)***

For more information about error detection prior to posting import records.

- Running the import ***(on page 227)***

For more information about processing import records.

Viewing the Import Message Log

To view the Import Message Log using the Import Profile Manager dialog, follow these steps:

Note: If you renamed an import profile, the associated message log is not renamed. However, it can be viewed by accessing Windows Explorer and searching for the file under its original import profile name. If you want to keep additional log history, you may rename and relocate logs as they become available.

1. Access the Import Profile Manager dialog

Access this dialog by selecting the Import Manager icon from the toolbar:

Alternatively, make the following selections from the menu:

Actions ▶ Office Integration ▶ Import

The Import Profile Manager dialog is displayed.

For practice, access the Import Profile Manager dialog.

2. Select the import profile

From the list of existing import profiles, highlight the one for which a log is to be displayed.

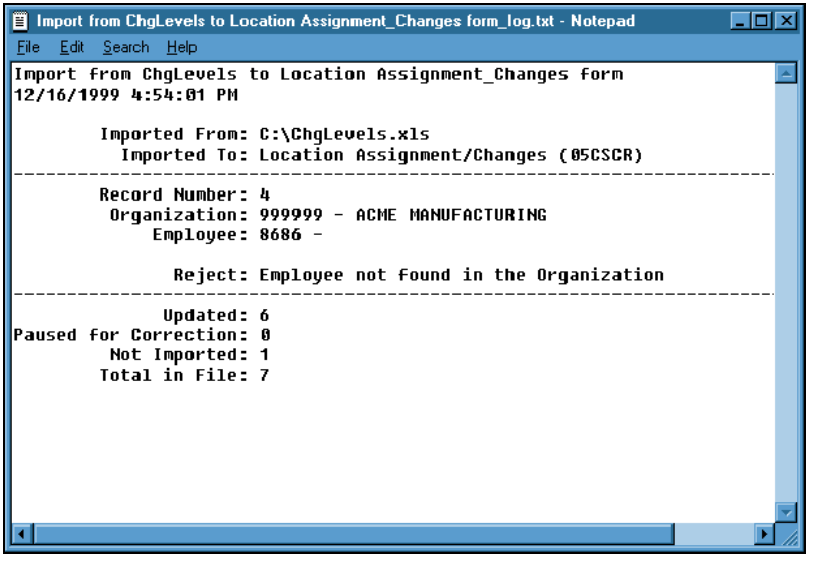
For practice, select an existing import profile.

3. Click View Log

Click View Log to display the Import Message Log for the profile. The Import Message Log is displayed.

For practice, click View Log.

If you completed the Guided Practice, the resulting dialog should look similar to the example that follows:



See also:

■ Running the import ***(on page 227)***

For more information about Import Message Logs.

Removing an import profile

To remove an import profile using the Import Profile Manager dialog, follow these steps:

1. Access the Import Profile Manager dialog

Access this dialog by selecting the Import Manager icon from the toolbar:

Alternatively, make the following selections from the menu:

Actions ▶ Office Integration ▶ Import

The Import Profile Manager dialog is displayed.

For practice, access the Import Profile Manager dialog.

2. Select the import profile to be removed

From the list of existing import profiles, highlight the one to be removed.

For practice, select an existing import profile.

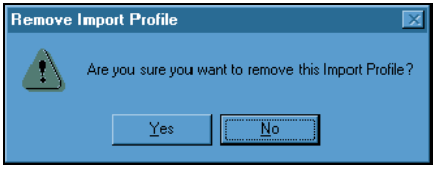
3. Select Remove

Click Remove to display the Remove Import Profile dialog.

For practice, click Remove.

4. Click Yes

This dialog allows you to proceed with the profile deletion or cancel the action. Click Yes to delete the import profile. Click No to cancel the action.



For practice, click Yes.

See also:

- Import profile conventions and maintenance ***(on page 219)***

For more information about removing an import profile.

Including and excluding target forms

To include or exclude forms in the Browse Forms - Import option list (SC52) using the Option List Editor (CSUPDT), follow these steps:

1. Access the Option List Editor (CSUPDT)

Access this dialog by making the following selections from the Navigator:

Component:	Development Tools
Process:	Option Lists
Task:	Edit

2. Enter the Option List Name

Type the name of the option list to be edited—'SC52'.

3. Click Find Now

The system displays the detailed information for the requested option list.

4. Click Create

A blank line is inserted, allowing you to add the new item.

5. Enter the Code

Type the program name of the form to be included or excluded, such as 'EF-SCR'.

6. Enter the Description

Type 'E' to indicate that this form is to be excluded. Type 'I' to indicate that a form is not an employee or company form but should be used within import, such as a time entry form.

Cyborg-delivered items in this option list may have one of the following entries in this location:

Entry	Definition
'I' or 'i'	Form is not an employee or company form, but should be used within import.
Any other character, including spaces	Excludes the form from import.

7. Click OK or press Enter

No items are updated in the option list until you click OK. When OK is clicked, the new item is immediately added to the option list. No confirmation message is displayed.

Note: If the form to be included or excluded is already in the option list, an error message will be displayed. Instead of adding a new entry, make a correction to the existing entry to include or exclude it.

See also:

- Target forms ***(on page 212)***

For more information about including and excluding forms.

Extended Practice

Using Excel for Office 97 (or higher version), create the following import data and save the Excel file as C:\Practice.xls. The first row is header information:

	Emp #	Date	Chg Type	OL3	OL4
999999	1111	20000101	C05	3333	4444
999999	1112	20000101	C05	3030	4040
999999	1113	20000104	C05	3338	4448
999999	1114	20000110	C05	3333	4444
999999	1115	20000112	C05	3338	4448
999999	1116	20000115	C05	3030	4040
999999	1117	20000116	C05	3333	4444

Then create a new import profile to move this data to the Location Assignment/Change form (05CSCR). Complete all of the necessary steps in the Import wizard:

- Select the form by expanding the Employee Resourcing component, and then expand the Maintain Basic Employee Details process. Then click the Location Change (05CSCR) task.
- Map each of the import items to its corresponding form item.
- Manually select '1st Occurrence' as the Key Separator, 'New York Office' as the EEO Establishment, and 'All Locations' as the Geographic Range.
- Finish the import profile.

Resolve any pre-import validation errors and run the import to a successful conclusion.

View the message log.

Review of Questions Answered

1. What tools can be used to export data?

2. What is the Import Profile Manager and what purpose does it serve?

3. What functions are provided by the Import wizard?

4. What control options are available for the import process?

CHAPTER 8

Document Management Facility

In This Chapter

Introduction

Additional desktop integration functionality provides the means to link documents such as resumes, performance appraisals, photos, and so forth, to employee records and then review and launch those documents from within The Solution Series.

Tasks

This section explains the following:

- Defining document types
- Linking documents to an employee record
- Viewing document links
- Launching a document from the Document Maintenance form
- Launching a document from the Document Explorer

Prerequisites

Before you can use the Document Launcher, The Solution Series must be installed.

Questions answered

The following questions are answered in this section:

1. What option list must be edited to support the document management facility?
2. What tasks must be performed to link documents to employee records?
3. How do you launch a document?
4. What security can be associated with this functionality?

Overview of the document management facility

The document management facility gives you the ability to attach files and documents to an employee record in your system. The file could be a picture such as an identification photo, a document such as a performance review, or a certificate such as a qualification certificate. Maintaining documents in this way provides an easy-to-use electronic filing system from which retrieval is only a few clicks away.

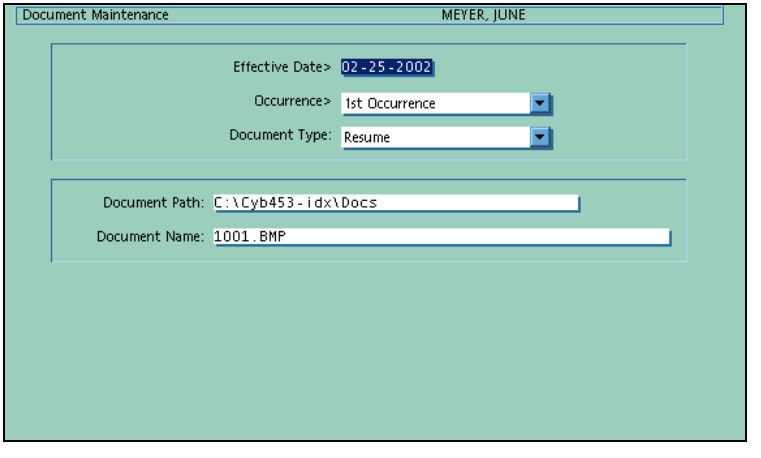
After you have installed the necessary files, the only setup required is to specify the document types you wish to store. These specifications are stored in the Document Definitions option list (SC55).

See also:

- Document types ***(on page 261)***

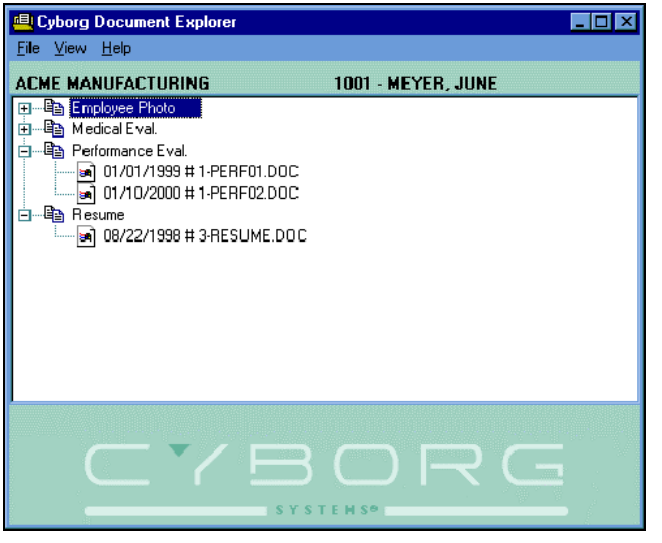
For more information about this option list, its use, and implementation considerations.

To link a file or document to an employee's record, you use the Document Maintenance form (DR-SCR):



This employee form allows you to specify the details of the document, including the path to the document location. The document can be stored locally or on the network. It does not have to be stored on the system server.

To view a specific document, you can access the Document Explorer to display, by document type, all of the documents attached to an employee record:



You launch the document by clicking the Launcher button:

The Document Explorer and Launcher buttons are available on the Launch toolbar.

The document is launched in the appropriate software, based on the file properties. For example, a .doc file will be launched in Word, and a .gif file will be launched in your browser.

See also:

- Linking documents to an employee record ***(on page 266)***
  For detailed directions for using the Document Maintenance form (DR-SCR).

- Viewing document links ***(on page 269)***
  For detailed directions for viewing all document management records on file for an employee.

- Launching a document from the Document Explorer ***(on page 272)***
  For detailed directions for using the Document Explorer.

Document types

The Document Definitions option list (SC55) is used to specify the different document types you want to attach to employee records. Each document type that you define in this option list contains the default file extension and default file location, to make accessing the documents easier. Using this option list to define document types also reduces the amount of information you have to set up for each document, since the defaults for that document type can be used.

Several document types are delivered. You can edit these and add your own document types as well. The following table displays the delivered document types and their option list entries. The characteristics for each document type are listed. The table headings include the maximum number of characters allowed for each item.

Code (2)	Document Type (20)	Default Extension (3)	Default directory (27)
IM	Employee Photo	BMP	C:\Docs\Images
ME	Medical Eval.	DOC	C:\Docs\Meds
PE	Performance Eval.	TXT	P:\Evals
RE	Resume	WPD	\\Product\Documents

You can specify as many document types as you need. You can be as specific or as general as you want when determining your document types. For example, you may choose to specify one document type for Performance Evaluations, or you may want to specify a performance evaluation for each year, such as 'Perform Ev 2000'. Keep in mind that the code identifier for each document type is only two characters long and each code must be unique.

Although you specify a default directory in the option list, there is opportunity to specify a location for each file if you want to. The same is true for the file extension. Although you may have specified a default file extension for a word processing file as .doc (that is MS Word), you could use a WordPerfect file. At the time that you attach the WordPerfect file to the employee record, you can indicate its specific file type by adding a document extension to the file name.

When using the Document Explorer feature, the documents for an employee will be displayed in Document Type order. In this sequence, it will be easy for you to review the documents that you have linked to an employee record, or find the another file you are looking for. Being specific with your document types can make finding documents easier in the future.

See also:

- Defining document types ***(on page 264)***

For detailed directions for maintaining the Document Definitions option list (SC55).

Document security

Documents can be stored in any directory, either local or on a network. They do not have to be stored in only one location. The path can be specified for each individual document.

Consult your Security Officer to discuss the ways you can secure the documents:

- Network and server security to restrict access to where the files are stored
- Security to restrict access to the Document Maintenance form (DR-SCR) and Document Explorer

Summary of interface options

The following interface options relate to this functionality:

- Launcher button
- Document Explorer button
- Document Maintenance bookmark

Launcher button

When you are displaying a document link on the Document Maintenance form (DR-SCR) this button launches a document in the application that is indicated by the file extension. It is located on the Launch toolbar.

See also:

- Launching a document from the Document Maintenance form ***(on page 271)***

For detailed directions for using the Launcher button.

Document Explorer button

This button launches the Document Explorer for the current organization and employee. It is located on the Launch toolbar.

See also:

- Launching a document from the Document Explorer ***(on page 272)***

For detailed directions for using the Document Explorer button.

Document Maintenance bookmark

This bookmark is used to access the Document Maintenance form (DR-SCR) for the current employee. It is an option on the Bookmarks list and can be added to your Favorites toolbar.

See also:

- Viewing document links ***(on page 269)***
- Launching a document from the Document Maintenance form ***(on page 271)***

For detailed directions on viewing and launching documents from the Document Maintenance form.

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Completing the Guided Practice

Only the tasks for ***Defining document types*** (on page 264), ***Linking documents to an employee record*** (on page 266), and ***Viewing document links*** (on page 269) include a guided practice. The remaining tasks require that documents already be stored and available on your server or local drive. In a classroom setting, the instructor may provide documents for your use in completing the tasks for ***Launching a document from the Document Maintenance form*** (on page 271) and ***Launching a document from the Document Explorer*** (on page 272).

Defining document types

To edit the Document Definitions option list (SC55) and define the document types, use the Option List Editor (CSUPDT) and follow these steps:

1. Access the Option List Editor (CSUPDT)

Access this dialog by making the following selection from the Navigator:

Component: Development Tools
Process: Option Lists
Task: Edit

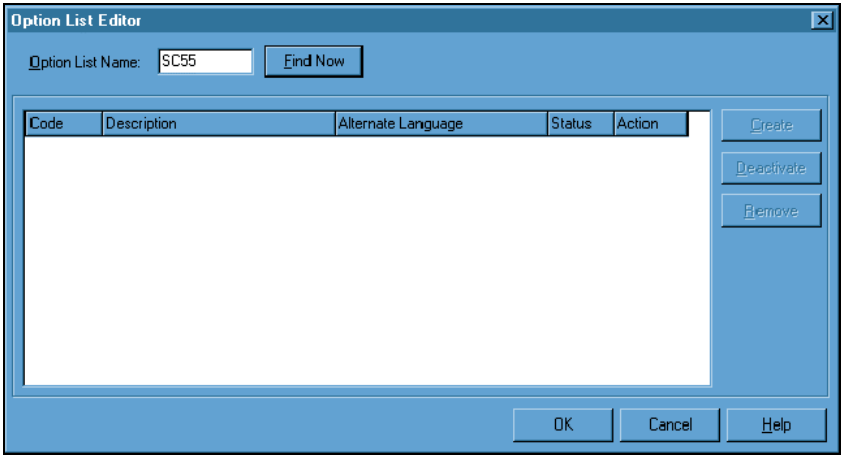
For practice, access the Option List Editor (CSUPDT).

2. Enter the Option List Name

Type the name of the option list to be edited, 'SC55'.

For practice, type 'SC55'.

If you completed the Guided Practice, the resulting form should look similar to the example that follows:



3. Click Find Now

A list of the existing document type entries will be displayed.

For practice, click Find Now.

4. Review the delivered default document type entries

5. To add a new entry, click Create

A blank line is inserted, allowing you to add the new item.

For practice, click Create.

6. Enter a two-character code

Use a unique two-character code to identify this document type.

For practice, type 'VS'.

7. Enter the Document Type description

Type the document type description in the Description text box using a maximum of 20 characters.

For practice, type "Visa".

8. Enter the default file extension and directory

For the Alternate Language text, type the default three-character file extension followed by the default directory path that specifies where this document type will be stored. The directory path can total up to 27 characters.

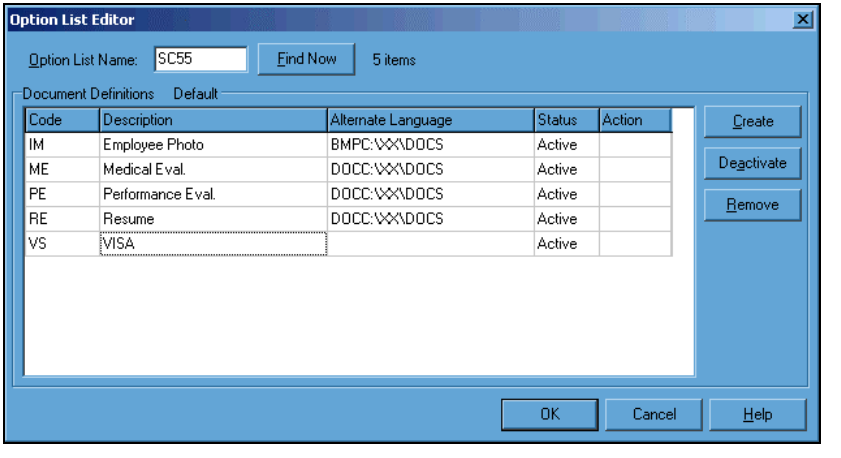
For practice, type "BMPC:\DOCS".

9. Click OK to update the option list

No items are added to the option list until you click OK. When OK is clicked, the new item is immediately added to the option list. No confirmation message is displayed.

For practice, click OK.

If you completed the Guided Practice, the resulting form should look similar to the example that follows:



Note: To add more than one entry to the Document Definitions option list (SC55), repeat steps 4–8 until all entries have been made.

See also:

- Document types ***(on page 261)***

For more information about the Document Definitions option list (SC55).

Linking documents to an employee record

To link a document to an employee record using the Document Maintenance form (DR-SCR), follow these steps:

1. Access the Document Maintenance form (DR-SCR)

Access this form by making the following selection from the Navigator:

Component: User Tools
Process: Add/Maintain Document Links
Task: Link Documents to Employees

Or use the Document Maintenance bookmark.

For practice, access the Document Maintenance form (DR-SCR).

2. Enter employee details

Enter employee number, name, or Social Sec number of the employee you want to use in the Employee Selection dialog box.

For practice,enter details for employee 1001 in Organization 999999.

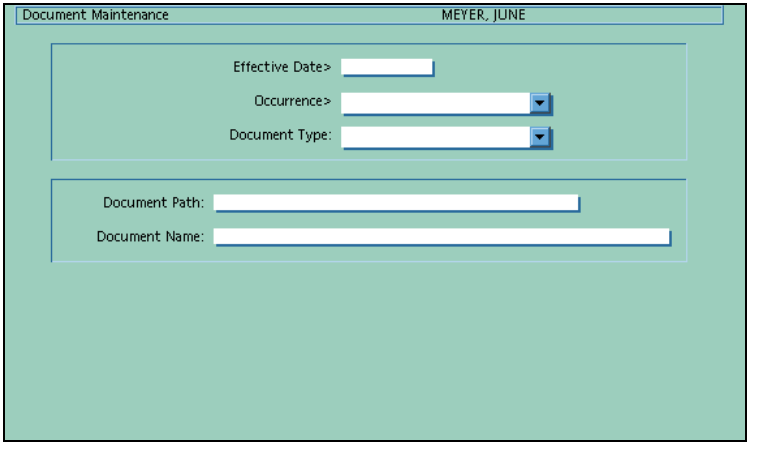
3. Click OK

The most recent occurrence of the record is displayed.

Note: If document links have already been set up for an employee, the most recent record will be displayed when you access this form. You may find it helpful to clear the text boxes before entering values for a new document link. To do this, click the Clear Fields button.

For practice, click OK then click Clear Fields when the Document Maintenance form (DR-SCR) is displayed.

If you completed the Guided Practice, the resulting form should look similar to the example that follows:



4. Enter the Effective Date

Type the effective date of the document. Enter the date in the format MM-DD-CCYY or CCYYMMDD (US and Canada, excluding Quebec) or DD-MM-CCYY or CCYYDDMM (elsewhere).

For practice, type '08-22-2000' (US and Canada, excluding Quebec) or '22-08-2000' (elsewhere).

5. Select the Occurrence

This entry allows a range of 1st to 10th Occurrence. Options for this list box are provided by the Key Separator Value option list (HR70).

An employee can have up to ten linked documents per Effective Date.

For practice, select '1st Occurrence'.

6. Select the Document Type

The Document Type is a required entry. Options for this list box are provided by the Document Definitions option list (SC55).

For practice, select 'Visa'.

7. Enter the document path (optional)

The Document Path is an optional text box that specifies the path where the document is stored.

If the document is stored at the default location, as specified in the Document Definitions option list (SC55) for this document type, there is no need to enter the path. The default will be assumed.

If the document is not stored at the default location, enter the specific path.

For practice, make no entry in this text box.

8. Enter the Document Name

This is the file name for the document. This entry is appended to the Document Path to create a complete file name.

This entry must be completed to ensure that the document is linked to the employee.

If no extension is specified, the default extension will be assumed as defined in Document Definitions option list (SC55) for this document type.

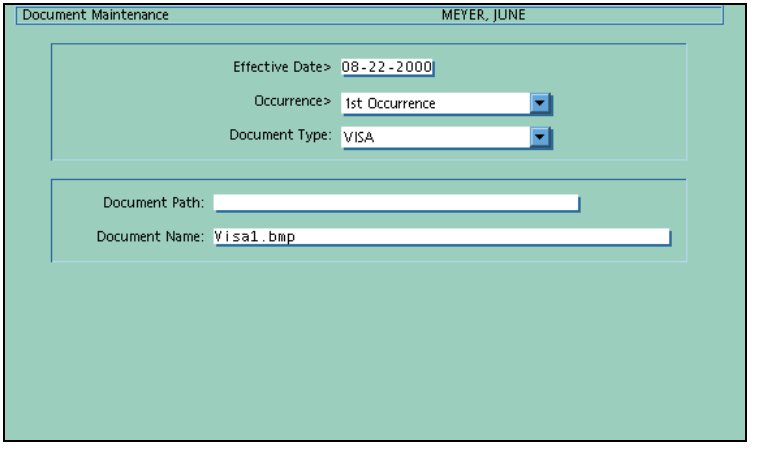
For practice, type 'Visa1.bmp'.

9. Press Enter to save the record

Press Enter to add the document link to the employee record.

For practice, press Enter.

If you completed the Guided Practice, the resulting form should look similar to the example that follows:



Note: You may set up another document link so that the guided practice for the next task can be completed. The second document link is for a performance evaluation dated December 1, 1998.

See also:

- Overview of the document management facility ***(on page 259)***

For more information about the Launcher and Document Explorer programs.

- Document Maintenance bookmark ***(on page 263)***

For more information on the Document Maintenance bookmark.

Viewing document links

To view all document links on file for an employee by displaying the selection list of the Document Maintenance form (DR-SCR), follow these steps:

Note: This task requires that more than one document link exists for the employee.

1. Access the Document Maintenance form (DR-SCR)

Access this form by making the following selection from the Navigator:

Component: User Tools
Process: Add/Maintain Document Links
Task: Link Documents to Employees

For practice, access the Document Maintenance form (DR-SCR).

2. Enter employee details

Enter employee number, name, or Social Sec number of the employee you want to use in the Employee Selection dialog box.

For practice,enter details for employee 1001 in Organization 999999.

3. Click OK

The most recent occurrence of the record is displayed.

For practice, click OK..

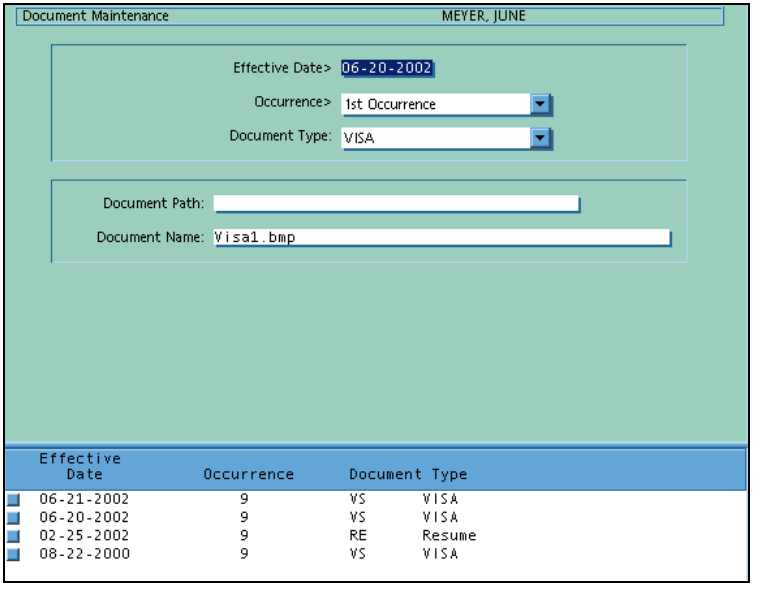
4. Click the Refresh Selection List button

Click the Refresh Selection List button on the Selection Menu toolbar.

The Selection List is displayed in date order, showing the most recent occurrence at the top.

For practice, click the Refresh Selection List button.

If you completed the Guided Practice, the resulting form should look similar to the example that follows:



5. Click the record you wish to view

Select the record occurrence from the selection list by clicking the button to the left of the selection.

The selected record displays.

For practice, click the button to the left of the record on the Selection List.

See also:

- Overview of the document management facility ***(on page 259)***

For more information about the Document Maintenance form (DR-SCR).

Launching a document from the Document Maintenance form

In order to launch a specific document, you must specify which organization, employee, and document you want. To launch a document from the Document Maintenance form (DR-SCR), follow these steps:

Note: There is no Guided Practice for this task.

1. Access the Document Maintenance form (DR-SCR)

Access this form by making the following selection from the Navigator:

Component: Reporting
Process: Add/Maintain Document Links
Task: Link Documents to Employees

Or use the Document Maintenance bookmark.

2. Enter employee details

Enter employee number, name, or Social Sec number of the employee you want to use in the Employee Selection dialog box.

3. Click OK

The most recent occurrence of the record is displayed.

4. Click the Refresh Selection List button to view all document links

Click the Refresh Selection List button on the Selection Menu toolbar:

The Selection List is displayed in date order, showing the most recent occurrence at the top.

5. Select the document link

While viewing the Selection list, click the button to the left of the document link you wish to view.

6. Click the Launcher button

To launch the selected document, click the Launcher button on the Launch toolbar.

The document is launched in the application indicated by the document file extension.

See also:

- Document types ***(on page 261)***

For more information on document types.

- Summary of interface options ***(on page 263)***

For more information on the toolbar buttons used for document management.

Launching a document from the Document Explorer

To launch a document from the Document Explorer, follow these steps:

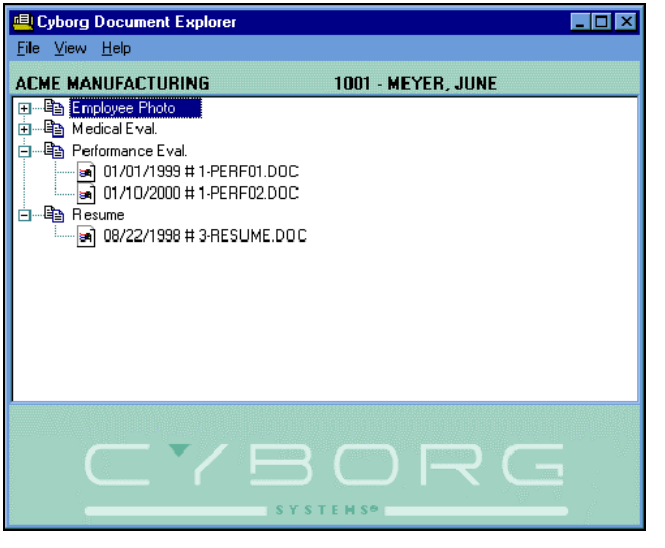
Note: There is no Guided Practice for this task.

1. Click the Document Explorer button

To launch the Document Explorer, click the Document Explorer button on the Launch toolbar while displaying any Solution Series form for the employee.

The Document Explorer displays each document type for which the employee has linked documents.

The resulting dialog may look similar to the example that follows:



2. Select the document type

Double-click the document type you are interested in. This expands the view to display the list of documents for that type. The document types are listed in alphabetical order.

Alternatively, select:

View ▶ Expand all

to expand the tree view to display all documents in all document types.

3. Launch the application and open the document

The documents are listed in date order. Double-click a document you want to see. This will launch it in the application indicated by the file extension.

If a Windows file association does not exist for the file extension, the Windows standard 'Open with' dialog will be displayed. Select the appropriate application.

If the file does not exist, a dialog will open giving you the option to create the file.

See also

- Overview of the document management facility ***(on page 259)***

For more information on the document explorer.

- Document Explorer button ***(on page 263)***

For more information on the Document Explorer toolbar button.

Review of Questions Answered

1. What option list must be edited to support the document management facility?

2. What tasks must be performed to link documents to employee records?

3. How do you launch a document?

4. What security can be associated with this functionality?

PART 4

Appendices

In This Section

APPENDIX A

Practice and Review Answers

In This Appendix

Introduction

This appendix provides answers for the Apply the Concept, Extended Practice, and Review of Questions Answered that are included in the instructional chapters.

Maintaining Option Lists

Apply the Concept

1. Based on your understanding of the option list types and naming conventions as explained in this concept, which of these two option lists would contain values that could be used by all organizations, even delivered test organizations—HR04 or HR459?

   Universal option lists have five-position names, with a blank in the fifth position. So the correct answer is HR04, because there is a blank in the fifth position. Universal option lists are delivered with the system and are populated. These option lists are available to all organizations, including the delivered test organizations.

2. Based on your understanding of the Option List Editor (CSUPDT) functionality as explained in this concept, indicate which of the following tasks you can complete after accessing it:
   Add a new item to an existing option list
   Add a new option list
   Change information about an existing item
   Delete an item
   Delete an option list

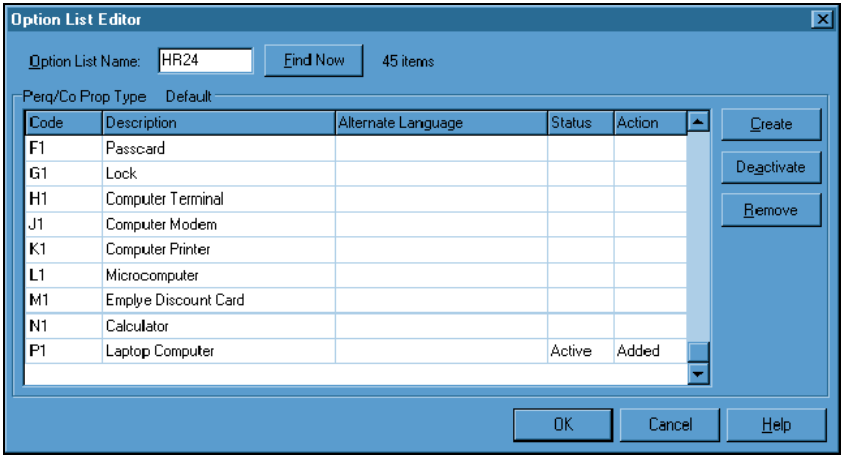
   You can use the Option List Editor (CSUPDT) to maintain existing option lists. You can add a new item to an existing option list, change information about an existing item, or delete an item. To create a new option list or delete an option list, you must use the Edit Utility (EDIT).

Extended Practice

Your company has purchased laptop computers for your consulting staff, and you have been asked to add this item to the Company Property option list (HR24). Using the Option List Editor (CSUPDT), add code 'P1' to option list HR24 and give it a description of 'Laptop Computer'.

After the new entry has been made, access the Company Personal Property form (22-SCR) for Jerry Jones, employee 1111 in Organization 999999, and record his newly assigned laptop computer.

Your option list entry should look similar to the example that follows:



Review of Questions Answered

1. What are the different types of option lists?

   Universal option listed are delivered with the system and are populated. They are available to all organizations. Type 9 option lists are delivered and populated. They are available only to the test companies and used for testing purposes. Organization-specific option lists must be defined. They are used to provide specific codes to specific organizations.

2. What is the Option List Editor (CSUPDT) and what is its purpose?

   The Option List Editor(CSUPDT) is used to maintain existing option lists. You can add a new item, change information about an existing item, or delete an item.

Designing a Business Process

Apply the Concept

1. Based on your understanding of checklists as explained in this concept, what processes in your organization would be most suitable for a checklist application? (Have you considered the termination process or the salary review and authorization process?)

   This response will be specific to your organization. Consider any business processes that require at least one mandatory form and more than one optional form.

2. Based on your understanding of the checklist wizard as explained in this concept, how could you benefit from examining the construction of the Cyborg-delivered universal checklists?

   Cyborg delivers an example checklist called 'Hire a New Employee'. Although it displays as one checklist on the Navigator and menus, it is actually five universal checklists working together. These checklists use many of the options available to you when you create your checklists. Consider looking at how these are constructed and how they work before creating your own. They can give you an idea of how checklists work in general and how the options you select affect how checklists work.

Extended Practice

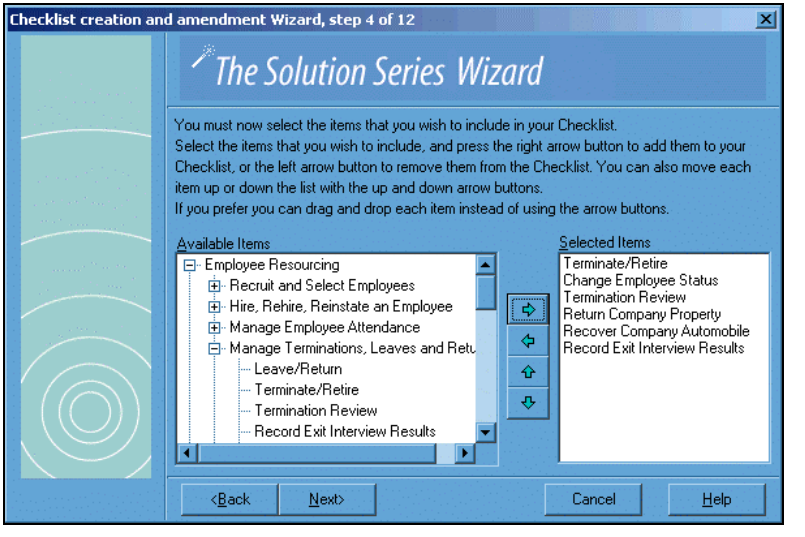
You have just been assigned the task of creating a universal checklist named 'Employee Termination Process'. Six forms will be included in the checklist. These can be selected from the 'Manage Terminations, Leaves and Returns' process of the Employee Resourcing component:

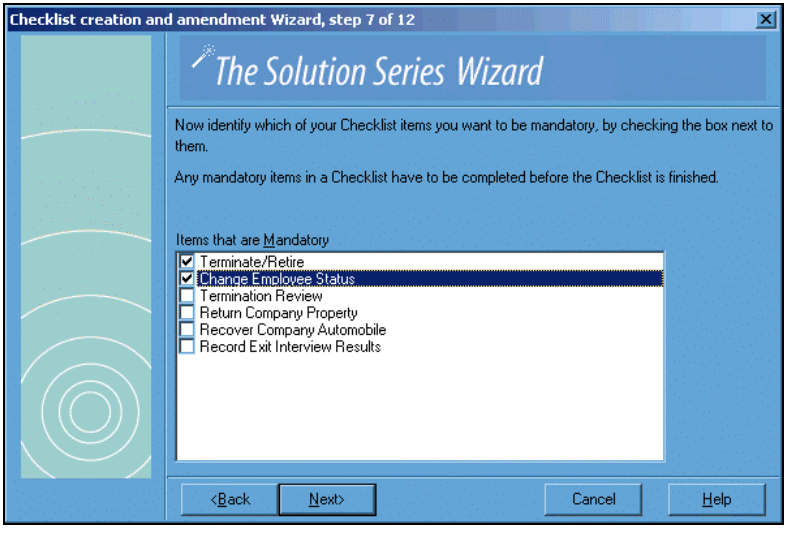
- Terminate/Retire
- Change Employee Status
- Termination Review
- Return Company Property
- Return Company Automobile
- Record Exit Interview Results

Select items 1 and 2 as mandatory. At your discretion, select or skip advanced features.

Remember that this checklist must be added to the menus before users can access it. You may add this checklist to the 'Manage Terminations, Leaves and Returns' process on the menus after you have reviewed the procedure in the next section.

Your checklist parameters should look similar to the examples that follow:





Review of Questions Answered

1. What is a checklist?

   A checklist is a list of tasks to be performed in sequence, within the Navigator. Checklists allow you to link tasks and even other checklists together to perform work flow functions.

2. What are the differences between a personal checklist and a universal checklist?

   Personal checklists are stored on your computer and only available to you; universal checklists are stored in the System Control Repository and available to everyone. Only universal checklists can be linked to up to 6 other universal checklists.

3. What tool do you use to create a checklist?

   You use the Checklist wizard to create a checklist.

4. What tool do you use to delete a checklist?

   You use the Remove Checklist dialog box to remove a checklist.

5. What tool do you use to control checklists?

   You use the Edit Utility (EDIT) to control a few options that can not be set using the Checklist wizard.

Maintaining Menus

Apply the Concept

1. Based on your understanding of the menu structure as explained in this concept, which level of the menu would you need to modify if you were adding a new form to the menu structure?

   The answer is menu level 4. Menu level 4 represents the third (last) submenu. This level links you to the system forms. You can not define a menu beyond level 4.

2. Would you also need to modify the Navigator to include the new form?

   The menu structure is mirrored in the Navigator. Because of this relationship between the menus and the Navigator, any changes made to the menus are automatically reflected in the Navigator. There is no additional work required.

3. Based on your understanding of shortcut keys as they are used in the menu structure, what letter would be defined as a shortcut key in the item 'Re&quisition Tracking"?

   The 'q' in Requisition is the shortcut key. To define a shortcut key for a menu item, you type an ampersand (&) before the letter to be used as part of the shortcut key combination.

4. Based on your understanding of menu maintenance as explained in this concept, when would you expect to see the changes you have made to a menu structure?

   When you finish editing a menu, both the System Control Repository and the Client Data File on your workstation are updated immediately. Other users will see the menu changes the next time they sign on to the system.

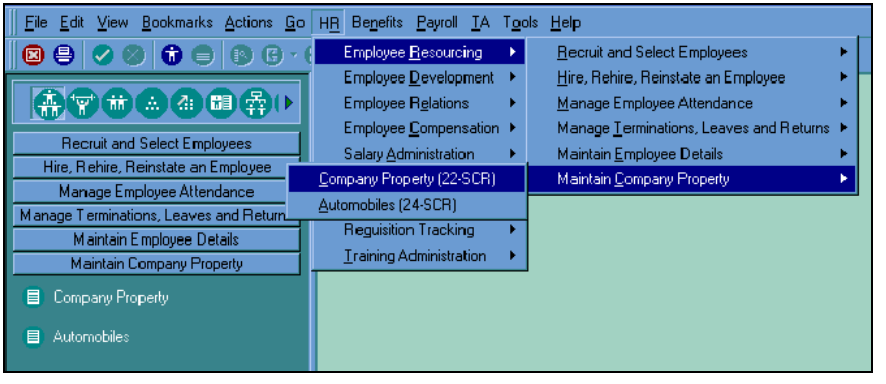
Extended Practice

Using the Employee Resourcing submenu, add a submenu (level 3) named 'Maintain Company Property'. Assign a shortcut key to this item.

Then add two forms to the level 3 submenu with item names of 'Company Property' (form name 22-SCR) and 'Automobiles' (form name 24-SCR). Assign shortcut keys to each new form.

Save your changes. View your changes online.

Your menus and Navigator should look similar to the image that follows:



Review of Questions Answered

1. What types of menus are delivered with the system?

   There are two types of menu delivered: function, such as File, Edit, and View, and application, such as HR, Benefits, and Payroll.

2. What is the relationship between the menu structure and the Navigator?

   The menu structure is mirrored in the Navigator. Menu levels two through four are shown in the Navigator, providing another way to access information.

3. What is the Menu Editor and how is it used?

   The Menu Editor is used to add, modify, and delete menu items. You can edit the delivered application menus and add your own menus.

Setting Up a Communication Event

Apply the Concept

1. Based on your understanding of the communication event triggers as explained in this concept, which business tasks in your organization require some employee or inter-office communication that could be triggered instead by a communication event?

   This response will be specific to your organization. You may consider tasks that involve the relay of training information, salary data, budget planning, or personal employee information updates.

2. In what cases are letters or memos being generated when emails could be more effective?

   This response will be specific to your organization. Consider any communication that relays non-confidential information, such as class scheduling or other communications that do not require a response.

3. Based on your understanding of the email communication event as explained in this concept, what method(s) would you use to determine the recipients and content of an email communication event in your organization?

   This response will be specific to your organization. You may choose automatic lookup of the employee, direct report, or indirect report, as well as lookups by employee name, address book, position, and manual entry.

4. Based on your understanding of the letter communication event as explained in this concept, what would be the advantage of queuing letters for printing later or being prompted when a letter is ready?

   These options are useful in situations when the printer is not in the same room or when letters need to be printed on different paper stock.

5. Based on your understanding of inserting fields as explained in this concept, what benefits can be derived from using system fields as part of your email and letter text?

   Making use of this option allows you to insert the most current and accurate information possible into the text of your email or letter.

Extended Practice

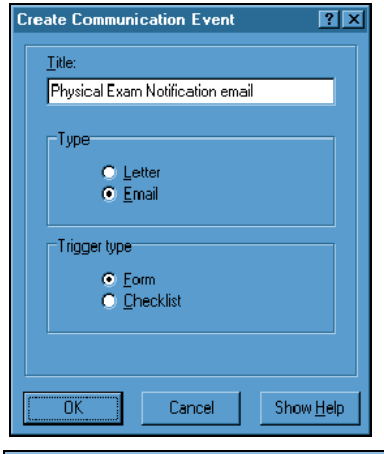
Create a form-triggered email event that will notify an employee when a physical exam appointment has been recorded. The event may be automatically triggered, or you may select a manual trigger. You may select the form name by expanding the Employee

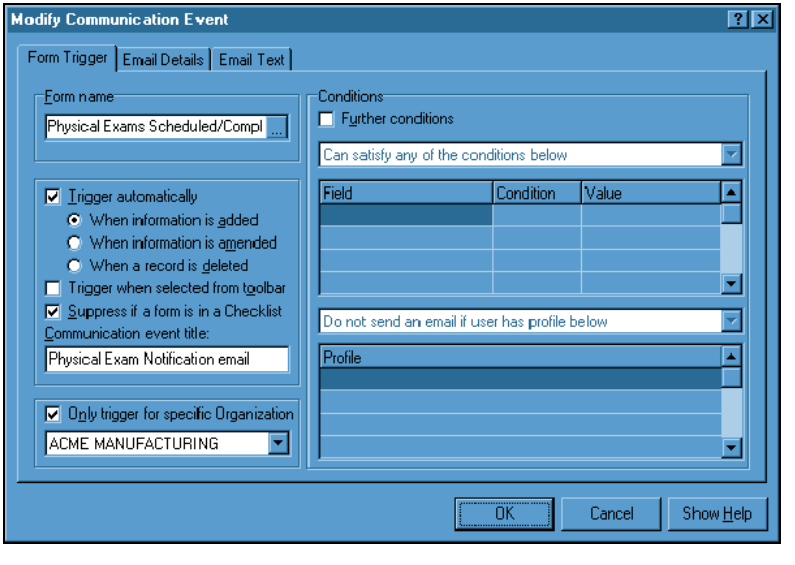
Relations component, then expanding the Manage Employee Health and Safety process, and selecting the Physical Exams Scheduled/Completed (18-SCR) task.

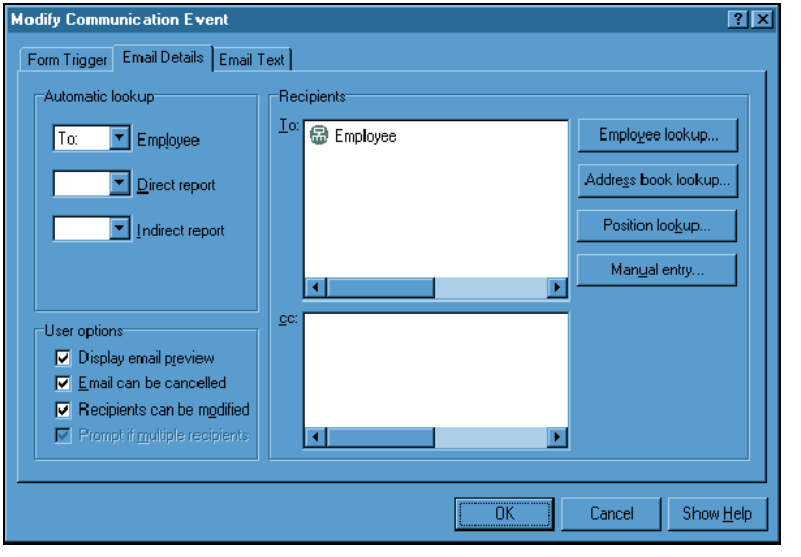
Set up the event so that it is triggered when information is added to the form. Set the option to preview or cancel the email. Create the appropriate email text and insert fields from the form to describe items such as the appointment date and physician.

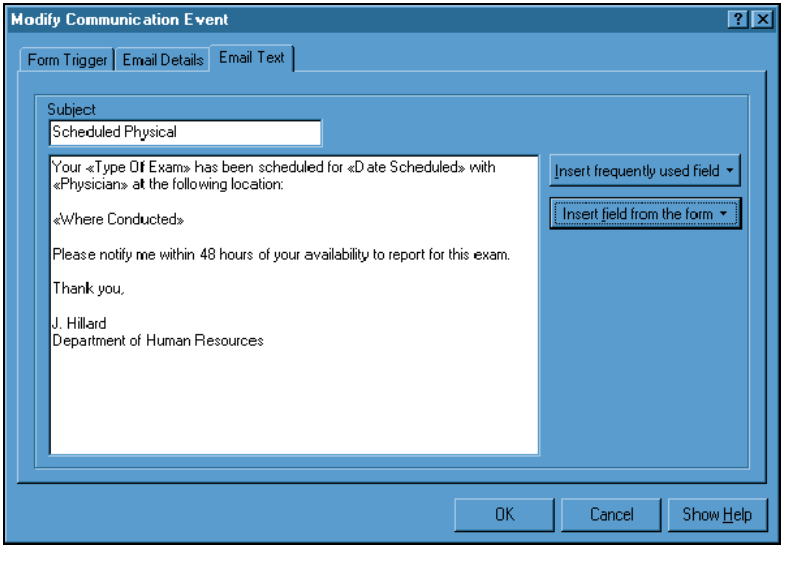
After you complete the event parameters, execute the form for a 999999 organization employee (such as Jerry Jones, employee number 1111) and preview the email.

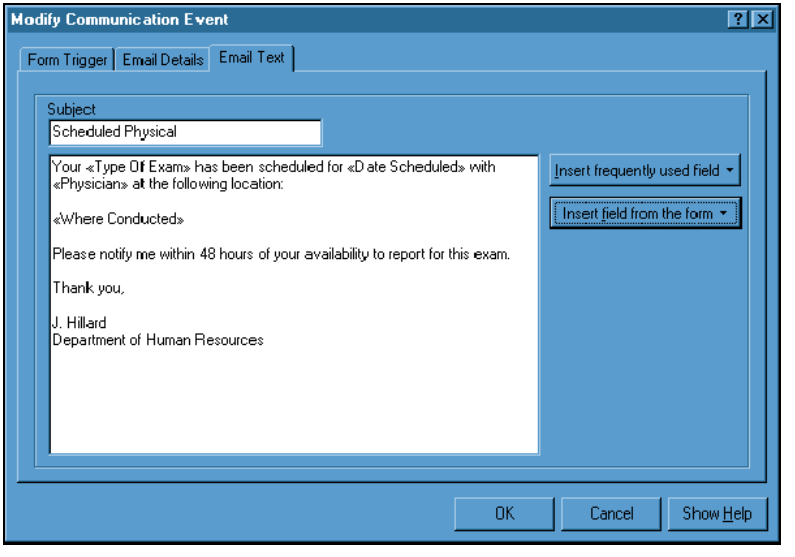
Your event parameters and email preview should look similar to the examples that follow:






Modify Communication Event
Form Trigger
Email Details
Email Text
Automatic lookup
To:
Employee
Direct report
Indirect report
User options
Display email preview
Email can be cancelled
Recipients can be modified
Prompt if multiple recipients
Recipients
To:
Employee
cc:
Employee lookup...
Address book lookup...
Position lookup...
Manual entry...
OK
Cancel
Show Help


Modify Communication Event
Form Trigger
Email Details
Email Text
Subject
Scheduled Physical
Your «Type Of Exam» has been scheduled for «Date Scheduled» with «Physician» at the following location:
«Where Conducted»
Please notify me within 48 hours of your availability to report for this exam.
Thank you,
J. Hillard
Department of Human Resources
Insert frequently used field
Insert field from the form
OK
Cancel
Show Help



Review of Questions Answered

1. What is a communication event?

   A communication event is the tool that can be used to send emails and print letters automatically or manually when employee data is created, updated, or deleted in the system.

2. What are the types of communication events?

   Using the Communication Event Manager dialog, you may set up parameters for the automatic and manual generation of two types of communication events—email and letters. Data to be contained within the email or letter comes from the form being used as well as delivered lists of frequently used fields. After communication event parameters are set up, the event can be modified, copied, and deleted.

3. What is a communication event trigger?

   Event triggers allow you to set up the parameters that will cause a communication event.

4. What types of triggers are available?

   There are two types of communication event triggers—form and checklist.

Exporting and Importing Data

Apply the Concept

1. Based on your understanding of the export options as explained in this concept, which one or more of the solutions will best suit the needs of your organization?

   This response will be specific to your organization. However, your choice may be influenced by whether or not your system is relational or whether you have purchased Reporting Administration.

2. Based on your understanding of the import sources as explained in this concept, would your organization be able to import a tab-delimited file that has been supplied by an insurance company?

   Yes. A tab-delimited file meets the requirements for a file that can be used as an import file.

3. Based on your understanding of the Import wizard as explained in this concept, how would you determine by looking at the display in Step 7 that all of the desired import items have been mapped to the target form?

   The top row of the import data column is updated to reflect the field name of each mapped item, regardless of the method chosen to create the mapping. Verify that all items to be mapped to the target form display a field name in the top row of the import data.

4. Based on your understanding of the import options as explained in this concept, which option would you choose for rejects and warnings if your organization was processing an import file that contained 75 records?

   Depending on the importance and sensitivity of the data, your best choice would be to pause the import to allow manual correction of the record. If correction required other resources or indicated more serious problems with the import data, you may prefer to stop the import and review the import file before restarting the import.

5. Based on your understanding of import run as explained in this concept, what control procedures would you implement to ensure that all import records are posted to your system?

   This response will be specific to your organization. However, you may consider an import control log that lists the number of records in the import file compared to the total number of import records as reported by the import message log. The number of updated records plus the number of corrected records should equal the total number of records in the import file.

Extended Practice

Using Excel for Office 97 (or higher version), create the following import data and save the Excel file as C:\Practice.xls. The first row is header information:

Org	Emp #	Date	Chg Type	OL3	OL4
999999	1111	20000101	C05	3333	4444
999999	1112	20000101	C05	3030	4040
999999	1113	20000104	C05	3338	4448
999999	1114	20000110	C05	3333	4444
999999	1115	20000112	C05	3338	4448
999999	1116	20000115	C05	3030	4040
999999	1117	20000116	C05	3333	4444

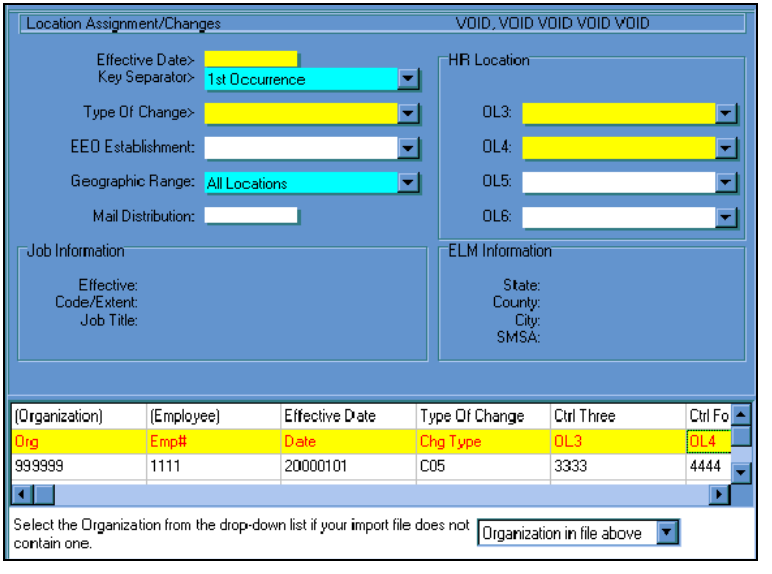
Then create a new import profile to move this data to the Location Assignment/Changes form (05CSCR). Complete all of the necessary steps in the Import wizard:

- Select the form by expanding the Employee Resourcing component, and then expand the Maintain Basic Employee Details process. Then click the Location Change (05CSCR) task.
- Map each of the import items to its corresponding form item.
- Manually select '1st Occurrence' as the Key Separator, 'New York Office' as the EEO Establishment, and 'All Locations' as the Geographic Range.
- Finish the import profile.

Resolve any pre-import validation errors and run the import to a successful conclusion.

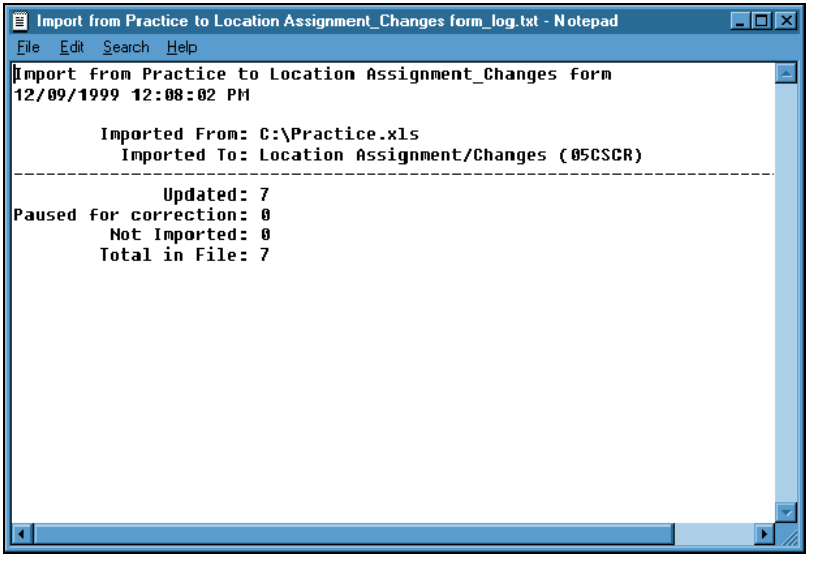
View the message log.

Step 7 of 8 should look similar to the dialog that follows:



Two errors display during the pre-import validation. The OL3 and OL4 option list values are incorrect for employees 1113 and 1115. Correct these values to be 3388 and 4488. Then start the import again at record 1.

The resulting message log should look similar to the following example:



Review of Questions Answered

1. What tools can be used to export data?

   You may select one or more of the following features to export data:

- *ISQL or another query tool—If you have a relational system, you can use these to run queries directly from your system's relational tables. You can then simply save the query content in comma delimited format, alter the data, and use the Import feature to reload in the manipulated data.*
- *Reporting Administration—Using this functionality is the easiest way to manipulate data. As delivered, Reporting Administration provides a means of extracting a great deal of information from your system. By reviewing the data already defined, you may determine that the data you want to extract is already defined. Then the task of manipulating data and importing it back into the system could be as simple as creating an Impromptu report, saving its content in comma delimited format, altering the data, and using the Import feature to apply the manipulated data. If this is the case, you need to verify that a fresh extraction has been performed before creating your Impromptu report.*
- *Batch Reports—Cyborg delivers hundreds of batch reports that have been developed using the Cyborg Scripting Language. You can use these reports in their delivered form or customize them to report on specific data. You can also use Cyborg Scripting Language to create your own program that could be run in batch to extract data.*
- *Solution View—The Report Writer in Solution View can be used to create an extract file from data in the system.*

2. What is the Import Profile Manager and what purpose does it serve?

   The Import Profile Manager is the tool that allows you to easily create, modify, rename, and remove an import profile, as well as start the import and view the resulting message log. The Create or Modify options on the Import Profile Manager launch the Import Creation and Amendment wizard.

3. What functions are provided by the Import wizard?

   The Import wizard allows you to complete the following functions:

   - *Choose the target form*
   - *Choose the import file*
   - *Select the import file delimiter and text qualifier*
   - *Specify the presence of an import file header record*
   - *Establish relationships between import data items and form data items*

4. What control options are available for the import process?

   You may choose an option for each of the following categories prior to starting the posting of import data:

- *Reject errors*
- *Warnings*
- *Communication events related to the target form*
- *Starting record for an import restart*
- *Automatic display of an import message log when the import has finished*

Document Management Facility

Review of Questions Answered

1. What option list must be edited to support the document management facility?

   Using the Document Definition option list (SC55), you must edit the Cyborg-delivered document types and add any document types needed by your organization.

2. What tasks must be performed to link documents to employee records?

   First, you must define the document types in the Document Definition option list (SC55). Then you must enter a Document Maintenance form (DR-SCR) for each document to be linked to an employee.

3. How do you launch a document?

   *You launch a document using t*he *Document Explorer or the Launcher.*

4. What security can be associated with this functionality?

   You can use network and server security to restrict access to the area where the files are stored, or you can use security to restrict access to the Document Maintenance form (DR-SCR).

Glossary of Terms

.EXE
A binary file containing a program in machine language that is ready to be executed.

.INI
A file that contains the parameters (values) used by the .exe file (program).

360-degree appraisal
Appraisals that include evaluations from an employee's managers and supervisors, peers, subordinates, and even customers, clients, and suppliers.

Absence data
Employee-level absence information that is entered on the absences forms.

Absence point
User-defined number that may be assigned for a particular absence and that can be totaled over time to determine if an employee is within the accepted number of absences for a time period.

Absence type
A classification of an employee absence, such as 'jury duty' or 'sick'. Employee absences are recorded by date and absence type.

Account timeout
The period of time that elapses before a user's account becomes invalid because of inactivity.

Accumulator id
A three-position, alphanumeric identifier for a benefits accumulator.

Acrobat
A suite of programs developed by Adobe Systems, Inc. For creating and distributing electronic documents. Programs in the suite allow you to create a portable document format (PDF) file for a document. You can then distribute the PDF file electronically to people who view the document with their freely distributed acrobat reader. People viewing a PDF file (or document) with the Acrobat Reader see the document with the exact layout intended by the author.

Action button
An action button performs an action such as saving the information you entered or telling the system you finished reviewing a page. An action button consists of an icon (or button) accompanied by underlined text (link text). For example, at various places throughout eCyborg Interactive Workforce you may see an action button displaying a check mark accompanied by the underlined text 'save changes'. You can click either the text or the button to save your changes to the page.

Activity code
Describes the clock transaction (ring) activity, such as clock start or meal end.

Activity types
With the time and attendance solution, you can set up the system so that an employee or group of employees may clock in and out for up to eight different activities: clock-in (1), break 1 start (2), break 1 end (3), meal start (4), meal end (5), break 2 start (6), break 2 end (7), and clock end (8).

Actuarial valuation
An examination of a pension plan to determine if contributions are being accumulated at a rate sufficient to pay the promised pensions.

Administration home page
The administration page that displays when a user logs on using his or her administrator user ID and password. The administration page displays links to individual administrator pages (eCyborg Interactive Workforce, Human Resources Administration, Benefits Administration, and Payroll Administration).

Administrative User ID
User ID created by an administrator with the role of eCyborg Interactive Workforce administrator. This ID

differs from the employee user ID generated for the administrator.

Aggregate tax method

Method of calculating taxes in which year-to-date income is used to project annual wages (using prorating), on which taxes are calculated. With this method, the amount of tax withheld can vary from pay period to pay period. This method is useful in preventing a salesperson from being over withheld as the result of fluctuations in commission over various pay periods. It is activated on the payroll solution by selecting aggregate/cumula tax (9) from the Withholding Method (PR09) option list on the Employee Tax Record Maintenance form. It is also referred to as cumulative tax calculation method.

Annualization

Process of calculating the annual amount of pay based on the number of pay periods and pay period amounts. Calculated by multiplying the number of pay periods in the year by the current taxable wages in the pay period.

Annualization factor

The factor that is used to multiply current pay period wages to determine annual wages. For example, a monthly pay frequency has an annualization factor of 12. The Payroll Solution typically calculates income taxes on the basis of annual wages. The annualization factor is entered by selecting an option from the Annualization (PP33) option list on the Company Pay Frequencies form for each pay frequency.

Annuitant

Someone entitled to receive or currently receiving payments from an annuity.

Annuity

A contract providing an income for a specific period of time.

Applicant

A person who is applying for a job or position in your organization. Internal applicants come from within your organization while external applicants come from outside of your organization.

Appraisal rating

A method of ranking the performance of an employee during a given period using options ranging from 1-outstanding to 5-unsatisfactory.

ASCII

American **S**tandard **C**ode for **I**nformation **I**nterchange. The basis of character sets used in almost all present-day computers; US-ASCII uses only seven bits to convey some control codes, space, numbers, most basic punctuation, and unaccented letters a-z and A-Z.

Ask Me wizard

A natural language, full-text search facility within the online help. This allows users to type in a question, the wizard interprets the question, and displays related topics.

As-of reporting

Ability to report on data for a specified date or date range.

Audit record

A snapshot of information entered on a form. Audit records are stored on the employee database and are displayed on audit reports in an is/was reporting format. Adjustments and time entries are stored as audit records and are extracted for a payroll run in which they update the employee's record.

Audit report

A report that is available after the running of a program; it lists created records as well as error messages for records that could not be created.

Audit trail

A report of changes made to your employee database, such as the Payroll Audit Trail (0101) report.

Authorized absence

Absences that are generally considered as paid time away from regularly scheduled work.

Automatic plan

A plan that has been defined with a default option and default pre- or posttax indicator (also known as core/default plan).

Average deferral percentage
Percentage used in nondiscrimination and compliance testing mandated by US law. The calculation is defined as the contribution divided by the compensation.

Average rating
A rating used for performance appraisal systems with categories weighted by relative importance, where the average score reflects the weighted scores.

Back
Takes the user back to the previous page.

Badge
Time and Attendance Administration can be set up to use two different types of badge readers. The type of badge your organization uses, is determined by your third party badge reader software. The two types of badges are magnetic badges and bar code badges.

Badge error
Occurs when a badge is used to create a clock transaction (ring) and an employee has not been assigned to the badge.

Badge number
Up to ten-character ID stored on employee badges and clock transactions (rings) that tie clock transactions (rings) to an employee on the ***Employee Database*** (on page 305).

Batch
A group of transactions submitted to the batch payroll processing system. Also, a collection of time entries that corresponds to an employee group, such as department.

Batch control record
Precedes all transactions separated by group; used to identify the company to which the transactions in that group apply. By entering anticipated totals for dollars and hours on the batch control record, you may verify your totals against those accumulated by the system.

Batch layout facility
A program that produces a segment layout for loading forms via batch. This was formerly known as BATCHL.

Batch number
An alphanumeric field on the batch control record containing a user-defined value used to identify a unique group of time entries or transactions.

Batch processing
A processing method that runs in the background and requires limited intervention.

Benchmark job
A standard or point of reference for determining total job points.

Beneficiary
A person named by the participant in an insurance or pension plan to receive any benefit provided by the plan if the participant dies.

Benefits control number
A four-position, alphanumeric identifier that specifies which tables are accessed for an organization.

Benefits statement
Report that indicates the coverage and cost of each benefits plan in which an employee participates.

Big option list
A large option list that includes a search facility. This was formerly known as a big codeset.

Bridge loan
A loan made to assist a relocated employee in purchasing a new residence before the sale of their old residence is complete.

Browser
Software application used to locate and display web pages. Modern browsers give users access to graphics, text, and multimedia information, including sound and video.

Budget plan year
A twelve-month period over which a salary budget is effective.

Budget scenario
The result of creating one or more salary plans in order to see the effect of different increase policies on the budget.

Budget setting
The process of analyzing and selecting an organization's salary budget for the coming plan year.

Cafeteria plan
A specific type of flexible benefit plan that allows employees to select their benefits from a number of benefit plans. This term may be used interchangeably with flexible benefits plan.

Calculation option list
An option list that contains calculation formula. This was formerly known as a calculation codeset.

Candidate
A person who is applying for a job or position in your organization and is under consideration.

Career planning
Providing career incentives such as advancement and additional education and training for individual employees in order to meet projected organizational needs.

Carrier record
A carrier record supplies information from one application area to another application.

Case-sensitive
A program that distinguishes between uppercase (capital) and lowercase (small) letters. A case-sensitive program that expects you to enter all commands in uppercase will not respond correctly if you enter one or more characters in lowercase.

Catalog
A file (with the extension of .cat) that contains all the information necessary for Impromptu to access and retrieve information from a relational database. The catalog provides a business view of the data, as well as information about what database to access, where the database is stored, and how the tables in the catalog are joined in the datamart.

Category code
General term used to refer to the option selected from category (PP01 and PP02) option lists on the company earnings and company deductions forms. It is used to indicate the type of earning or deduction.

CE/H
Abbreviation for considered earnings/hours.

Change control facility
A facility for updating and comparing your system control repository. This was formerly known as MAINTI/MAINTO.

Check box
A standard windows control that displays a yes/no setting, either checked (yes) or unchecked (no).

Check digit
Unique identifier that is generated by the TBLCHK program and used by the system to check the table relationship records.

Checklist
A list of tasks to be performed in sequence. The checklist displays within the navigator area. Checklists link tasks and other checklists together to perform work flow functions. Users can display a checklist by selecting a checklist icon within the tasks in the navigator.

eCyborg Interactive Workforce specific—a list of tasks/pages generally displayed in a chart with hot spots (links) for the checklist items. The user clicks the link to access the page.

Checklist item
An item appearing within the navigator when a checklist is being displayed. Checklist items include tasks, dialogs and even other checklists.

Checklist item status
Defines the status of a checklist item. These can be:

- Available to perform
- Required
- Not available
- Already completed

Checklist margin
The area of the navigator that displays the checklist item status when a checklist is being displayed.

Checkmark
If in the done column of a eCyborg Interactive Workforce checklist, indicates that an item on a

checklist is complete. Can also indicate OK, finished, submit, and so forth.

Class
A class is an occurrence of a course that is specific to a location and a date, that is being administered using Training Administration. For example, 'eCyborg: Using the Web Client′ on Thursday, December 21, in Chicago is a class of the course 'eCyborg: Using the Web Client'.

Class evaluation results
These are the results as entered on the evaluation forms filled out by the class participants upon completion of the class. These results are recorded on the class evaluation results form.

Client data file
File containing information replicated from the System Control Repository. Used by client workstations to improve response time, since editing can be performed locally. May be located on each client workstation or may be located on a server and be shared by multiple client workstations on the network. Formerly known as the Client Control File.

Clock in and out
Also referred to as swipe/swiping the clock. When an employee uses their badge to record an activity time, they must pass their badge through the badge reader. This action can be referred to as clocking in and out.

Clock transaction
Record containing the information needed to create time entries for payroll processing. Clock transaction (ring) information includes date, time, and badge number. A clock transaction (ring) is created when a badge is swiped through a clock.

Clock transaction warning
Occurs when a clock transaction (ring) time falls outside of an employee's schedule warning times.

Closing costs
The costs associated with the purchase of a new house.

CLP
Abbreviation for certificates, licenses, and permits.

Codeset
A list of valid code values and associated descriptions from which you may select an appropriate entry. This is now known as an option list.

Coefficient
Customer-defined value used in the formula to calculate a new salary grade midpoint value.

Combined register (2222) report
A report that provides a detailed printout of all earnings, hours, taxes, and deductions for all the payments and adjustments made on a payroll run. It is Report Generator 2222.

Command button
A standard windows control that initiates a command of sets an option (previously known as push button).

Common tax organization
A method of setting up taxation in an organization in which all necessary tax specification records are contained in a single organization. The common tax organization often handles tax specification records more efficiently, since it avoids duplication of the federal tax records and of any state or local records used by multiple companies.

Communication event
A letter or email that can be triggered automatically or manually within the system. Communication events are set up by the system administrator and usually include data from a form or record.

Compa ratio
The ratio of a given salary compared with the midpoint of the salary range. The formula is the salary divided by the midpoint.

Competency
A requisite capacity to perform a single or set of skills or activities.

Complement limit
A 'complement limit' is the maximum number of complement units that can be assigned to a position at any one time.

Complement position
A 'complement position' is a position that is included in complement control.

Complement unit
A 'complement unit' is the type of unit used to measure the value of a position, for example, headcount, fte or hours.

Compliance
Conformity in fulfilling legal requirements.

Component
The first level of functional organization on the navigator or menu, such as employee resourcing or employee development.

Component icon
An icon that denotes the current component. There are a number of components within the system. Each component appears as an icon on the navigator.

Component plan
Any plan included under the flex master plan or grouped together under a group master.

Condition
Predefined criteria that can be added to a report's filter.

Considered earnings
An employee's paid earnings that are to be accumulated, based on plan rules, for use in determining credited service or calculations of final benefits amounts.

Considered earnings/hours (CE/H) accumulators
Used only in benefits plans to accumulate the earnings and hours an employee has acquired toward eligibility for a deferred plan. Accumulators may be retained on a monthly, quarterly, or annual basis.

Considered hours paid
Actual number of hours for which an employee was paid and that are to be accumulated based on plan rules.

Considered hours worked
Actual number of hours an employee worked. These hours are to be accumulated based on plan rules for use in determining credited service for a plan participant (or for a non-participant if eligibility has been met).

Consolidated reporting
Option that enables packaged reports to be processed for all organizations (consolidated).

Customer-defined value used in the formula to calculate a new salary grade midpoint value.

Context-sensitive help
Information about an object and its current condition. It answers the question 'what is this?'

Contribution type
The type of contribution being made to a benefits plan. The system allows for the deduction and accumulation of up to five different contributions per plan: basic employee pretax, basic employee posttax, supplemental employee pretax, supplemental post-tax, and organization.

Control 1-2
A company or group of employees (now known as an organization).

Control levels
A hierarchy of values used to determine the breakdown of an organization for reporting purposes. The values are user-defined.

Control number
An alphanumeric designation assigned to a table to define the table records that will be used for each organization.

Conversion
A method for transferring data from either a manual or automated system into the system.

Co-ordinator
A coordinator is an instructional institution, organization or person who administers training courses.

Core plan
One of the plans that make up the minimum benefits in which all eligible employees are required to enroll—for example, medical and life. Employees who fail to return enrollment forms with their benefit choices may be automatically enrolled in the core plans (also known as default plans).

Cost categories
Cost categories are classifications or divisions used to separate costs for training into broad groupings, for example, equipment or operating costs.

Cost types
Cost types are used to further define training costs. For example, the category of equipment could be further broken down into the cost type of overhead projector and monitor rental.

Costing
Projecting the future cost of a benefits plan contribution for budget purposes.

Course
A course is a separate unit of instruction in a subject being administered using the training administration solution. For example, 'eCyborg: Using the Web Client′ is a course. This may be applied to a training course provided internally or externally.

Course directory
A course directory is a list of all available courses.

CPI
Characters **p**er **i**nch

Credited service
The number of years of employment for which an employee is given credit for use in determining final benefits amounts.

Crew
A group of employees who rotate from one schedule assignment (shift) to another, following a rotation pattern.

Crew code
A unique, one-character, alphanumeric identifier of a crew.

Cross-reference keys
Provide direct query access to data within the system database.

CSL
Abbreviation for ***Cyborg Scripting Language*** (on page 303).

Cumulative data
Also called 'to-date data'. includes payroll earning, deduction, net pay, taxable wage, and tax to-date figures for employees.

Cursor
A special symbol, usually a solid rectangle or a blinking underline character, that signifies where the next character will be displayed on the screen. To type in different areas of the screen, you need to move the cursor. You can use the arrow keys or a mouse to move the cursor.

Customer-defined
Values that depend on an organization-specific definition--for example, option list.

CYB88X
An English Language root program used to set the production version switch to on or off, in addition to other automatic settings.

Cyborg Scripting Language
Cyborg's fourth-generation programming language, previously called English Language.

Data extract
Method for extracting information from The Solution Series for the purpose of subsequently loading it into eCyborg Interactive Workforce databases.

Data load
The process of moving data from one system or media to another. It encompasses data mapping, data extraction and conversion, and the actual loading of the data. Also the method of loading data extracted from The Solution Series into eCyborg Interactive Workforce databases using programming scripts.

Data mapping
The process of identifying, comparing, and matching data (field to field) to be converted from one system or media to another.

Database
A collection of information organized so that a computer program can quickly search for and select specific pieces of data. Think of a database as an electronic filing system.

Datamart
Relational tables with a defined structure that have been designed to automatically accept full datamart extract data seamlessly.

Deduct credits by plan
A method of distributing flexible benefit credits. The total monetary value for credits is prorated based on the employee's pay frequency. Credits are given to employees as earnings added to their pay; the cost of individual employee plans are collected through payroll deductions and listed on the employee's payment stub.

Deduct credits by plan method
A method of distributing flexible benefit credits. Credits are given to employees as earnings added to their pay; the individual employee plan costs are then collected through payroll deductions.

Deduction
An amount subtracted from available net pay. Deductions can be involuntary (child support or maintenance) or voluntary (pension plans).

Deduction cycle
A predetermined schedule for taking voluntary deductions, based on the defined frequency.

De-enrollment
The process of shutting off plan benefits for an employee for reasons other than a separation activity.

Deferred compensation
Any benefit that is not immediately payable to an employee, but is instead deferred to a later date. This term refers to retirement vehicles, including all defined benefit, defined contribution, stock, and thrift/savings plan.

Deferred plan
Any benefits plan in which benefits are not immediately payable to an employee, but are deferred to some later date. This term refers to retirement vehicles, including all defined benefit, defined contribution, stock, and thrift/savings plans.

Delimiter
A character that tells the system where an item of data ends and another starts.

Dependent
An individual who relies or depends on another for his or her support.

Dependent number
A unique number in the eCyborg Interactive Workforce database that identifies an employee's spouse and his or her other dependents.

Detail page
A page in eCyborg Interactive Workforce that displays detailed information. Summary pages contain links to the detail for each record.

Dialog box
A secondary window that appears on the screen to present information or request input. Dialog boxes are generally temporary—they disappear after you enter the requested information.

Disability insurance tax
A tax required by some us states to be funded by employee-paid contributions to pay all or part of the cost of disability insurance coverage. On the Payroll Solution, us state disability insurance tax records are established as Type 4 taxes.

Disciplinary action
Action taken against an employee for violation of an organization policy or procedure.

Discretionary increase
A salary increase amount or percentage determined by a manager according to the guidelines established by the organization.

Display
Make data or images display on a computer monitor.

Display box
An area on a form in which data is displayed (formally known as an inquiry field).

Disposable income
For garnishment purposes in the us, an employee's earnings minus deductions required by state or federal law.

Distributed location
A customer location where data changes are replicated and may be distributed. A DL is identified to the system by a unique 5-position alphanumeric node ID.

Distribution
The process of passing data from a source DL to one or more target DLs.

Distribution rules
A set of parameters that determine how data will be distributed from one DL to another. These are defined at each DL by the owner using the distribution rules screens. Distribution rules are stored in tables that are not replicated (thus, they cannot be distributed).

DL
Abbreviation for ***distributed location*** (on page 304).

Double-click
Click a mouse button twice in rapid succession.

Drop-down list
A drop-down list is a view of the acceptable entry options available for a text box.

Drop-down list box
A standard windows control that displays a current setting but can be opened to display a list of choices. The user selects a choice by double clicking on the choice. The user can type into the field, and the system moves the list of choices to the last letter typed.

Dynamic SQL
Statements created by a program that must be interpreted and converted to executable sql statements at run time.

Earned income credit
A refundable amount that reduces the tax owed by certain low-income individuals in the us who meet adjusted gross income levels.

Earning
Money paid in return for work performed or services rendered. In Payroll Administration, earnings are separated by earning numbers into various categories such as regular pay, overtime pay, shift pay, bonuses, and so forth.

Earnings category
Used to categorize similar earnings. For example, all the overtime earnings can be grouped into category 01, all the shift differentials/premiums into category 06, and so forth.

EBCDIC
Extended **B**inary **C**oded **D**ecimal **I**nterchange **C**ode; binary code for alphabetic and numeric characters developed by IBM for its computers.

eCyborg Interactive Workforce Home
Button on every page that returns the user to the eCyborg Interactive Workforce Home Page.

eCyborg Interactive Workforce Home page
Home page that displays each time employees log on to eCyborg Interactive Workforce after completing the new user tasks on the New User Home page.

Effective date
Date on which an event takes place, for example, an enrollment or benefits plan change.

EIC
Abbrevation for ***earned income credit*** (on page 305).

EL
Abbreviation for English Language, now called CSL (Cyborg Scripting Language).

Electronic Performance Support system
Online tools that help users perform their job quickly and efficiently. EPSS can include online help, computer-based training (CBT), electronic manuals, wizards, and so on.

Email
Literally 'electronic mail'. This is a message that is sent to one or more people within or outside of your organization by an automated email software package.

Employee cancellation
An employee cancellation occurs when an employee is canceled from attending a training class or training program.

Employee Database
The file that contains organization and employee records. This is File02. It was formerly known as the Master File.

Employee Database record
The complete record for an employee. It may be composed of multiple physical records.

English Language
Former name of Cyborg's fourth-generation programming language, now called Cyborg Scripting Language.

Enrollment form
A customer-defined form used by employees to record their benefits elections and any associated dependent and/or beneficiary information.

Entitlement accrual
An accumulation of hours for an employee benefit, such as sick leave or vacation time, commonly known as an accrual.

Entity
Each Organization Unit, Job, Position, and Incumbent is an entity. Together they are entities.

Entry field
An area on a screen or browser page where the user can input information.

Entry form
An entry form is a form used to enter data.

Environment
The host platform and workstations where your Cyborg system resides, and any communication protocols. Also, a work space dedicated to a specific processing type. For example: development, test, and production.

EPSS
Abbreviation for ***Electronic Performance Support system*** (on page 305).

Event
The combination of a trigger (changes made to system data) and an action (the creation of an email or letter). Events always consist of these two component halves.

Excused absence
Absences from regularly scheduled work that can be considered as either paid or unpaid time off.

Extract file
A data file generated to be used by another system or application.

Federal Insurance Contributions Act
The United States Federal Insurance Contributions Act imposes two taxes on both employers and employees. Tax is withheld from an employee's wages to finance the Old-Age, Survivor's, and Disability Insurance (OASDI) social security program and the Hospital Insurance (HI) medicare program. Employers are then required to match the amounts withheld from employees. On the Payroll Solution, employee information for FICA-OASDI social security tax is entered on tax record 101 and FICA-HI Medicare tax on tax record 103.

FICA
Abbreviation for Federal Insurance Contributions Act.

Field
A data item on the database. This is usually displayed on a form as a text box.

eCyborg Interactive Workforce specific—A space allocated for a particular item of information. A tax form, for example, contains a number of fields: one for your name, one for your Social Security number, one for your income, and so on. Every field has a name (also called a field label).

Filter
Device used by report to select certain rows of information from the database, thus limiting the amount of data from the database to be viewed in the report.

Finished
Users click Finished when they have completed all information on a checklist or other *ESS* page.

Flat rate tax
A US local tax that is calculated as a standard percentage rate and that is calculated in the same way for all employees (that is, factors such as marital status do not enter into the calculation). For many such local taxes, Cyborg does not provide tax specification information on the Tax Authority File. Instead, you need to enter a Tax Specification Record for the tax on a Tax Specification Information form, indicating the tax rate in the Flat Rate text box.

Flex credits
Units granted to an employee in order to purchase benefits under a Flexible Benefits Program.

Flex Master Plan
Defines your Flexible Benefits Program and ties component plans together as a group. Employees are enrolled in the Master Plan and then select the benefit plans in which they wish to participate—for example, medical, dental, and life. Flex master plans are set up in Benefits Administration and used by eCyborg Interactive Benefits to display benefit plans to users for initial and open enrollment.

Flex plan
A benefit plan where, in addition to a core of basic benefits (if applicable), the organization/company allocates to each employee a credit for purchasing additional benefits tailored to their individual needs. Flexible benefit plans may include a flexible spending account.

Flexible Benefits Plan
A specific type of benefit plan that allows employees to select their benefits from a number of benefit plans. This term may be used interchangeably with cafeteria plan.

Flexible Benefits Program
A benefits program in which an organization may allocate to each employee a pool of credits or a monetary amount that is to be used to purchase benefits tailored to individual needs.

Flexible Spending Arrangement
A benefits welfare plan set up as an account in an employee's name that is used to reimburse the employee for certain personal expenses. In the United States, these accounts are provided by employers as a way for employees to pre-fund dependent care, legal services, or medical expenses with pretax currency.

Folder
Logical organization device for the content of a Cognos catalog.

Form
A window of information that appears within The Solution Series, including text boxes and other controls. This was formerly known as a screen.

Form area
An area of the window that contains a form.

Form Builder
A tool provided by Cyborg Systems for use with The Solution Series for designing forms.

Formal education
Education that is obtained from a college or university.

Forward
Displays the next page.

FSA
Abbreviation for Flexible Spending Arrangement.

FTE
Abbreviation for Full Time Equivalent.

FTP
File **T**ransfer **P**rotocol. A means of allowing a user on one computer to transfer files to and from another computer over a network

Full Time Equivalent
The ratio of total working time to the time that represents full time employment for a single employee. For example, an FTE of 0.5 means working half of the time that represents full time employment.

Funeral days
Absences from regularly scheduled work due to a funeral, which at the discretion of the organization, can be considered as authorized or unauthorized, paid or unpaid time off.

Gap analysis
Comparison of a current state of being with a desired state of being. For example, you could perform a skill or competency gap analysis on individual employees or on the workforce as a whole, comparing the existing state of skills and competencies with the required state or level of skills and competencies.

Garnishment
A legal procedure authorizing a deduction from an employee's earnings to satisfy a legal requirement.

General ledger interface
A file that provides a balanced payroll journal for the period. This file contains journal entries for labor expenses, withheld deductions, income, disability, UI, and other withheld taxes, net pay, and company-paid taxes. The interface may also be produced on paper.

Go to details
Displays a new page with detailed information. Used on summary pages.

Graphical User Interface
The Solution Series provides integrated human resource and payroll functionality via the Microsoft Windows Graphical User Interface. These are the elements that display on your screen.

Grievance
A formal complaint made by an employee against the organization usually because of an unsatisfactory working condition or other work-related dispute.

Gross wages
The total of all earnings paid to an employee.

It is stored in the Total Pay (field 119 of the US Tax Authority File) field of the employee's US FICA tax record 101 (FICA-OASDI). This figure appears on the Combined Register (2222) report as Total Pay. It does not appear on US W-2 forms.

Group box
A standard Windows control that groups a set of controls.

Group plan
Defines any number of benefit plans tied together as a group. Group plans are used to define common eligibility and to cluster plans for reporting purposes.

GUI
Abbreviation for Graphical User Interface.

Handicap
Having a physical or mental disability that substantially limits activities especially in relation to employment or education.

Health and safety profile
Data on the employee record that includes information such as the employee's blood type, language, physician, emergency contacts, and any disabilities.

HED
Acronym for Hours, Earnings, and Deductions. Each earning or deduction must be established in The Solution Series with a unique identifying three-digit code. HEDs are used to record pay, hours worked, and deduction amounts and arrears for each employee.

Help
Hot spot on an eCyborg Interactive Workforce page that displays step-by-step directions for completing the page.

History record
Part of an employee's payment history; a snapshot of a check paid to an employee or an adjustment made to an HED or tax.

Holiday days
The time off that all employees are entitled to based on the decision of the organization or government regulation.

Home page
The main page of a Web site that generally serves as an index or table of contents to other documents stored as pages on the site.

HTML
Abbreviation for **HyperText Markup Language,** the authoring language used to create documents on the World Wide Web. HTML defines the structure and layout of a Web document by using a variety of tags and attributes.

Import facility
A tool delivered with The Solution Series that moves data from an external source to any organization or employee form.

Import record
A line in a spreadsheet or delimited file that contains employee or company data.

Inactive plan
A benefits plan that no longer allows employee enrollment.

Inactive tax record
An employee tax record that is no longer in effect for a given employee. Neither wages nor taxes are accumulated for the particular tax record. However, any wages and/or taxes already accumulated remain until clearing is performed. Such clearing is usually performed in preparing the Employee Database for a new year. The inactive records can be deleted at this

time. The process of making a tax inactive is called deactivating.

Incumbent
An incumbent is an employee linked with a specific position. The linking of an employee with a Position is an incumbency. An employee may be linked to more than one position; in other words, an employee with multiple incumbencies. A position to which more than one employee is linked has multiple incumbents.

Information-level security
These records grant access to employee and table data via specific password records.

Initial Administrator
Only user whose user ID and password are created during installation. The initial administrator always has authority to all administrative functions: eCyborg Interactive Workforce, Human Resources Administration, Benefits Administration, and Payroll Administration, and can assign administrative roles to others by creating administrative user IDs and passwords.

Initial passwords
Password generated by eCyborg Interactive Workforce for each user ID extracted from The Solution Series. Users must create a user-defined password when they log on to eCyborg Interactive Workforce for the first time.

InitialAdmin
See Initial Administrator.

Inquiry form
A inquiry form is a form used to view data already entered.

Instructional text
Any paragraph(s) on the page that explain the function of the page or fields to the user.

Internal candidate
An employee of your organization who is applying for another job or position in your organization.

Internet
A global network connecting millions of computers.

Intranet
A network belonging to an organization, usually a corporation accessible only by the organization's members, employees, or others with authorization and used to share information.

Investment funds
Different options or accounts available to employees for allocating their contributions, usually applicable to thrift/savings plans.

IPEDS
Integrated Postsecondary Education Data System.

Job assignment
A job associated with a particular employee.

Job code
A designation for a job assignment.

Job streams
A generic reference, Job Control Language, for your operating system's command language.

Alternately: Jobstreams

Job type
A generic category that further defines a particular job.

Jury duty
This is compulsory service on court appointed juries. Employers are required by law to excuse jury duty related absences. They are not, however, required by law to pay the employee during this time away from the job.

Label
Text that describes the information the user enters into the field.

Labor record
A record containing the hours, amounts, associated charge-to control levels, and function assigned on the employee's Payroll Home Location/Pay Allocations form.

Leave of absence
Occurs when an employee leaves the organization for a period of time, usually temporary, for personal reasons such as medical leave.

Log off
Logs the user off the system. When referring to the Log Off button, use initial caps.

Logical Employee Model
A collection of default employee information that is used to create a model. Logical Employee Model templates are used when hiring new employees to save time and ensure that critical information is established consistently and correctly. These were formally known as LMODELs.

LPI
Lines **p**er **i**nch

Mailing address
An address, other than your legal residence address, to which you have your mail sent.

Maintenance payroll run
A maintenance payroll run automatically updates organization and employee records, but it does not process time entries or generate payments, pay slips, or deposit advices. It is also used to create payment history records.

Major activity
Event that causes a change in an employee's employment status, such as a new hire, termination, or rehire.

Mandatory field
A field that requires the user to enter information before the user can exit the screen or page.

Map file
Stores the predefined relationships between an import file and a form.

Mass time entry creation
Creating time entries for a group of employees through one program execution, such as for a paid holiday.

Master File (0202) report
A Cyborg report that produces a formatted display of the data in an employee's current batch Employee Database record. This includes the wages and taxes accumulated for the employee, covering current, month-to-date, quarter-to-date, and year-to-date information for individual tax codes. It is report generator 0202.

Matrix ID
Unique identifier for each pay-for-performance matrix.

Menu
A list of choices; the choices are generally links that take the user to another screen or page.

Menu bar item
A menu that appears on the menu bar.

Message area
An area of the window that contains messages or selection lists relevant to the current form. The Message Area can be turned on or off.

Method code
One of many specific routines (usually delivered by Cyborg and identified by a two-character code) used to calculate earnings and deductions.

Midpoint
The middle of the span of currency from the minimum to the maximum of the employee salary grade.

Minimart
Relational tables you create so you can insert data from your Subset data extractions.

Monetary perquisites
A privilege or profit that an employee is entitled to that is incidental to regular wages or salary.

Moving expenses
The expenses incurred by an employee due to moving from one location to another for employment purposes.

Multiple master
A file compression technique that duplicates the current employee Permanent Master Record as many times as there are payments to that employee during one pay period. These multiple masters are detail records reflecting the amounts for the payment being made (current), and the adjusted MTD, QTD, and YTD totals. The system uses multiple master records to create history records showing the current payment figures only.

Navigation bar
In eCyborg Interactive Workforce the Navigation bar shows the name of the page you are using, for example, 'Mailing Address'. The top line of the Navigation bar

shows the path you took from the Home page to reach the present page. Links on the Navigation bar let you return to the home page or log off the system.

Navigator
Left pane of the work area which forms the main method of moving through the forms. From the Navigator users select the component, process, and task in which they are interested.

Net credit method
A method allocating flex credits. An employee's cost of benefits is calculated as either a net cash earning or a net deduction from the employee's pay. The net amount is the difference, either plus or minus, between the credits allocated to the employee and the cost of his or her flex benefits choices.

New hire
Process of hiring a new employee for your organization.

New user
A user of eCyborg Interactive Workforce who has not yet completed reviewing and updating their personal information on the New User Home page.

New User Home page
Home page that displays for new users of eCyborg Interactive Workforce until they complete reviewing and updating their personal information.

Node
A Distributed Location.

Node ID
A unique 5-position identifier for a node. The naming convention is defined by the user.

Number registered
This is the number of employees registered for a training class. It is updated and displayed on the Class Schedule form.

Object
Each System Control Repository record type is assigned an object code. A single record type can have several object codes assigned to allow limited display.

Object key
A field that allows you to specify the System Control Repository record group you want to display. The value of this field is dependent on the type of information you want to display.

Obsolete plan
A benefits plan that will no longer be used.

Off cycle
An off-cycle payroll run is an additional payroll for the period just completed. An off-cycle payroll run is commonly used to process nonstandard payments, such as bonuses. It is sometimes referred to as an additional or bonus payroll run.

Online
Turned on and connected, for example, printers are on-line when they are ready to receive data from the computer. Users are considered on-line when they are connected to a computer service through a modem. That is, they are actually on the line.

Open enrollment
A period of time during which employees can enroll in or change their benefit choices for the upcoming year, generally in October or November.

Operator ID
A four-character code that identifies the user to the system.

Option
An item in the option list for a field. This was formerly known as a codeset item.

eCyborg Interactive Benefits and Benefits Administration specific—In Benefits, the plan coverage that an employee selects, such as single or family coverage.

Option button
A standard Windows control that allows you to select from a fixed set of mutually exclusive options (previously known as radio button).

Option list
An option list is a list of options that are available within a Text box. This was formerly known as a Codeset.

eCyborg Interactive Workforce specific—Options available in The Solution Series that the eCyborg Interactive Workforce administrator loads in to eCyborg Interactive Workforce. The options are then available in the drop-down list boxes in eCyborg Interactive Workforce.

Organization

A group of employees who are employed in a common structure, governed by the same set of rules or policies, and eligible for the same earnings and deductions For example, your organization may be structured into parts that represent employee groups such as active, union, retirees, applicants, and so forth.

Formerly known as a company or Control 1-2.

Organization Level 3

A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so forth, as defined by you.

Organization Level 4

A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Organization Level 5

A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Organization Level 6

A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Organization Number

A six-character user-defined code that represents an organization; the highest level of the organizational structure in Payroll Administration.

Formerly known as a Control 1-2.

Organization Unit

An organization unit ('Org Unit') is a grouping of Positions within an organization (for example, Accounts Department).

Organization Validation table

A table that validates that an organization is valid and payments can be made.

Organization-specific tax setup

A method of implementing Tax Specification Records in which each organization involved in tax processing contains all the specification records required to process taxes for its employees, as opposed to a common tax organization.

Override file

A file used to maintain COBOL or Report Generator changes to the system.

Packaged reporting

A processing mode in which a job is scheduled to be run at a certain time.

Paid absence

Employee absence that will be paid by the organization. A time entry will be created for this absence.

Parallel run

The process of executing the same programs simultaneously on two separate systems to obtain the same or similar results.

Parameter form

A form that is displayed when certain programs are called from the Navigator or menus. The form facilitates entering parameters for the program.

Password

A secret series of characters, generally user defined, that enables you to access a computer, a software application, or a file. On multi-user systems, each user must enter his or her password before the computer will respond to commands.

In eCyborg Interactive Workforce, the password ensures that unauthorized users cannot access user-specific information.

Password aging
The period of time that elapses before a user-defined password expires and the user must change his or her password.

Pay allocation
A means of allocating, on a percentage basis, employee labor hours and amounts to multiple sets of control levels 3 through 6 and function to accurately reflect employees whose labor must be charged to more than one area within an organization.

Pay document
A pay slip or deposit advice with its associated pay stub.

Pay frequency
The interval at which a group of employees is paid. Examples are weekly and semimonthly. Also referred to as a payroll period.

Pay schedule
A predetermined schedule for a calendar year, identifying period-end and payment dates for each pay frequency.

Pay stub
A preprinted form, corresponding to a check or deposit advice that lists all earning, gross pay, taxes, deduction, and net pay information for an employee.

Pay-for-performance matrix
Chart representation of the variables that result from the combination of salary increase information, how much to give and when.

Payment history record
A record documenting the detail information for a payment or adjustment. Multiple payment history records may be generated for an employee, reflecting multiple adjustments or payments. These records include all earning, deduction, and tax information included in the payment or adjustment.

Payroll home location
The location where the employee is normally assigned to work and where labor distribution information is charged. An employee's home location comprises specific Payroll Levels and is always assigned Allocation Number 01 on the Payroll Home Location/Pay Allocations form. The Function field may also be used as part of a home location, depending on your specific requirements.

Payroll Level 3
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so forth, as defined by you.

Payroll Level 4
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Payroll Level 5
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Payroll Level 6
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Payroll period
A defined period of time for which an employer pays wages to employees.

Payroll Process Control
A series of forms used during the Payroll Process to determine the type of run (payroll run or maintenance run). Allows you to specify the pay frequencies to be paid and which reports are to be produced.

Payroll run
Updates organization and employee records, processes time entries, calculates employee pay, generates pay documents and payroll reports, including the Combined Register. It also produces a variety of special interface outputs.

PCL
Printer **C**ontrol **L**anguage

PDF
A file format that captures formatting information from a variety of desktop publishing applications, making it possible to have formatted documents appear on the screen and be printed. To view a file in PDF format, you need Adobe Acrobat Reader, a free application distributed by Adobe Systems.

Peer-group appraisal
Appraisal that uses performance evaluations completed by an individual employee's co-workers or project team members.

Pending de-enrollment segment
Plans for which an employee is enrolled, but has lost eligibility, as listed on the Pending Plan Enrollment/De-Enrollment form.

Pending eligibility segment
Plans for which an employee is eligible but not enrolled, as listed on the Pending Plan Enrollment/De-Enrollment form.

Performance appraisal
A periodic assessment and ranking of an employee's skills and accomplishments.

Performance appraisal rating
A method of ranking the performance of an employee during a given period using options ranging from

1-Outstanding to 5-Unsatisfactory.

Performance rating
A method of ranking the performance of an employee during a given period using options ranging from 1-Outstanding to 5-Unsatisfactory.

Performance-related pay
Monetary payments made to employees based on how well an employee has fulfilled job expectations.

Perquisites
Property or privileges extended to an employee.

Personal days
Authorized absences that are generally considered as paid time away from regularly scheduled work, but can be either paid or unpaid.

Phonetic keys
The keys you use to access employee data using the phonetic spelling of an employee's last name.

Pixel
The smallest rectangular area of an image on a screen.

Plan deactivation
A process that makes a plan inactive and prevents future employee enrollment.

Plan ID
A three-position, alphanumeric identifier for a plan in the system.

Plan shutdown
The process of de-enrolling an employee from all benefits plans because of a separation activity.

Plan year
The 12-month period over which a salary budget is effective.

eCyborg Interactive Workforce specific—The calendar, policy, or fiscal year in which the records of a Benefits plan are maintained.

Policy tables
Highest level tables that are used to record the generic (or master) rules for an organization or group of employees. These included your organization's rules relating to working time procedures, such as clocking in and out, docking for lateness, and overtime. Each policy consists of a Policy Master table and one or more Policy Activities table.

Pop-up menu
A menu that appears when you use the second mouse button within the system. This menu contains context sensitive commands and options that relate to the object you have clicked on.

Portable document format
See PDF.

Position
A specific role with an organization—for example, Accounts Manager.

Alternative definition: to place an object in a specified location.

Position Administration Control Number
Two-character alphanumeric value that tells Position Administration which tables to use for a specific company.

Position complement
A 'Position complement' is the value of a Position. The organization complement is the total value of all Positions included in the complement.

Position in range
The difference between a given salary and the minimum of the salary range, divided by the difference between the range's maximum and minimum, and expressed as a percentage.

Posttax
A contribution made after taxes have been withheld from earnings.

Premium
The amount of money an organization agrees to pay an insurance company for a policy or annuity, or the amount contributed by an employee to the employer to cover the employee's portion of the total premium.

Prenotification
Informing a bank or credit union that an employee will be using direct deposit with them in the future. Cyborg recommends that you fill out the Direct Deposit Information form two pay periods in advance of the first deposit date. This ensures that a prenotification record is provided to the bank or credit union in a timely manner.

Pretax
A contribution made before taxes have been withheld from earnings.

Primary account
The account set up in eCyborg Interactive Workforce to receive an employee's pay or reimbursement checks. After deductions and deposits to additional (secondary) accounts, the remainder of pay is deposited into the primary account.

Process
A subset of a component that logically groups tasks on the Navigator or menu. For example, the process 'Maintain Employee Details' contains tasks such as 'Basic Employee Information' and 'Personal Information'.

Alternate definition: An action that brings about a result.

Process bar
The graphical representation of a process on the navigator. Each process bar is within a Component.

Program
A program is a series of classes being administered using Training Administration. For example, 'The Cyborg Training Schedule for January-June 1996' may be a program consisting of eight different classes.

Alternative definition: a form or other program within the system, accessed directly from the Command dialog box. For example, form EF-SCR is a program.

Protected amount
The amount of disposable income protected from garnishment in the US This amount may vary from state to state.

Prototype HED
An HED defined on a benefits form for use in recording employee/organization contributions when an employee is enrolled in a benefits plan. This allows the setup and maintenance of payroll deductions using Benefits Administration.

Provider
A provider is an instructional institution, organization, or person who is available to teach training courses.

Push button
A button on the interface which appears depressed when clicked on (now known as command button).

Quartile
Points that represent the division of a salary grade range into four equal parts.

Query alternate keys
The keys you use to access the employee master record in an order other than by primary key.

Query primary keys
The keys you use to direct your QUERY program to a record type.

Quick Hire
The process of hiring an employee by entering one two-panel form with the required data elements rather than entering a series of forms.

Radio button
A button on a form that selects an option, the radio buttons that make a field are mutually exclusive (now known as an option button).

Recall
Return a laid-off employee to active status, usually with no affect to benefits.

Reciprocal taxation
Reciprocal tax withholding refers to agreements made between US states and (or) localities regarding income tax calculation and reporting for compensation paid to an employee who lives in one state or locality and works in another.

Record
A complete set of fields, such as the fields that make up a tax form or a name and address record.

Alternate definition: To set down for preservation in writing or other permanent form.

Recruitment
Process of finding and hiring new employees who meet the needs of your organization.

Recycle File
P05IN; A file that contains employee data and pay document information required for payment reconciliation. It also contains time entries to be processed and paid at a later date. This file is used to pass data to the next payroll or maintenance run.

Registration
Registration is the act of enrolling an employee in a class.

Registration number
A three-digit registration number is assigned to employees for tracking purposes when they register for a training class. This enables the order in which the employees registered to be viewed.

Rehire
The process of hiring a former employee of your organization. Typically, a break in service is incurred and benefits must start over (usually requiring a new adjusted seniority date if used in benefits tracking).

Reimbursement account
The account into which employee's travel and other expense type reimbursement checks are directly deposited.

Reinstatement
The process of returning a former employee to active status within a certain time period (such as 90 days), thus qualifying the employee to have certain benefits restored to the original hire date.

Reject time
The point at which an error condition will occur. An error condition must be manually corrected/approved and approved before a time entry can be generated by the system.

Relocation
The process of moving an employee from one organization to another geographic location, whether the move be domestic or international. This process also applies to applicants who are being relocated as part of the hire process.

Remaining net pay
The 'bucket' of money that is left after all employee deductions and taxes have been taken from the employee's gross pay. This 'bucket' of money can then be used for multiple deposits if the enterprise sets up multiple deposit HEDs.

Replication
The automatic process of writing changes made in the Employee Database and option lists and tables in the System Control Repository to the Replication Holding File (FILE08).

Replication Application
English Language program (DSAPLY) that reads records from the Replication Packet File (FILE20) produced by the Replication Reception program (DSRECV) and updates the System Control Repository and Employee Database accordingly.

Replication Distribution
Two COBOL programs that work together to distribute and receive updates. The Replication Distribution Program (DSTRIB reads either the Replication Holding File (FILE08) or a Replication Packet File (FILE20), selects data applicable to a specific DL and writes all necessary data to a new output-only Replication Packet File (FILE21). The resulting FILE21 will be processed on the remote DL via the DSRECV Replication Reception program.

Replication Holding File
FILE08. This file contains additions, changes, and deletions to the System Control and the Employee Database. Data is distributed from and written to this file, based on the data distribution rules configured for the target DL by the source DL.

Replication Packet File
(FILE21/20). This file contains data changes and is created specifically to update a target DL. This information may include Company/Employee data, tables and option lists, and time entry and adjustment records.

Report
The term report refers to a report produced on paper.

Report Generator
A program that produces the batch payroll and the batch payroll reports.

Report Group
A series of packaged reports that are created using the Report Group Activities form and are run together.

Report Group Scheduler
This is the program that allows you to schedule reports. This was formerly known as the Report Scheduler.

Report parameters
Specific guidelines for determining the information to be processed by a given report or program.

Requisition
A formal request to fill a vacancy or vacancies.

Requisition candidate
A candidate for a vacancy represented on a requisition.

Requisition limit
A total unit value of a requisition.

Requisition unit
The value of a requisition expressed as an FTE, hours, salary or headcount.

Retirement
Occurs when an employee retires from the organization.

Return
The activity of an employee returning as an employee to active status, usually following a leave of absence.

Alternative definition: key on keyboard used to perform a carriage return, can also be known as Enter.

Review process
A method used by an organization to evaluate an employee's salary or performance in a standard, timely manner.

Roll-up reporting
Option that enables packaged reports to be processed within organizations (roll-up).

Rotation pattern
A way of describing the working pattern for a group of employees (crew) who regularly work different shifts. A crew is a group of employees who together regularly work the same schedules according to a rotation pattern.

Safety standards
Legally-mandated workplace safety standards.

Salary budget record
Defines, for each employee, the budgeted increase amount, percentage, and effective date for a specific salary plan year, and the prorated effect of this increase on the budget in terms of amounts and percentages for each employee.

Salary grade
A range of salary amounts associated with a particular job.

Salary grade range
A range of salary amounts associated with the salary grade for a particular job.

Salary plan
A set of rules or guidelines used to budget for salary increases for the coming year.

Salary plan year
A 12-month period over which a salary plan is effective.

Salary range
The span of salary amounts from the minimum to the maximum of the employee salary grade.

Salary review
A periodic evaluation of an employee's compensation.

Salary review authorization form
Hard copy format of the employee criteria necessary to review and approve proposed salary increases.

SAT file
The Solution Series form appearance table. Simple text file that reflects the form's layout.

Save Changes
Saves the page (form) the user completed. (When you click 'Save Changes', eCyborg Interactive Workforce saves the information on the page whether or not the user made changes.)

Schedule Activities table
Identifies activity types for each point in a work day where the process of clocking in and out should be dealt with. Each Schedule activity also contains time parameters that will be used to calculate whether an employee will be docked or credited time.

Schedule assignments
Also referred to as a schedule. This term refers to the details of the Schedule Master tables to which an employee is assigned. These details include the date the assignment took place, the Schedule Number and Sub-Schedule Number, and (if applicable), the crew to which the employee is assigned.

Schedule error
Occurs when a clock transaction (ring) time falls outside of an employee's schedule reject times.

Schedule Master table
Used to set up your organization's Time and attendance rules (such as HEDs and the minimum number of hours an employee must work before a meal deduction is made). A Schedule Master table is associated with a Calendar Routine, earnings Code, and Shift Premium table by entering the appropriate identifier.

Schedule number
A unique three-character alphanumeric identifier used to partially identify a schedule table.

Screen
Now known as a form.

Scroll bar
When information on a page takes up more than one screen of your monitor, the system adds scroll bars to the right side of the screen. On the scroll bar:

- Click the up arrow to move line by line to the top of the page
- Click the down arrow to move line by line to move to the bottom of the page
- Click the double arrows to move several lines up or down the page

Click and drag the bar in the scroll area to manually move up or down the page.

Search argument
The value from an employee's master record used to search benefits tables to apply plan rules to specific groups of employees.

Search type
The definition of a field from an employee's master record to use as the search argument.

Secondary account(s)
Additional account or accounts at financial institutions that employees set up in eCyborg Interactive Workforce receive a portion of their pay. A primary account must be defined before an employee can set up additional accounts.

Security Officer
The assigned employee who is responsible for the setting up and monitoring of the security your Cyborg system.

Self-adjusting taxes
Taxes for which the system automatically recalculates the tax on a cumulative year-to-date basis on each payroll run.

In the U. S. these include FICA taxes: Social Security (tax record 101) and Medicare (tax record 103). The purpose of this calculation is to avoid any differences (of pennies) in FICA tax paid versus FICA tax due at year-end due to rounding on a pay period basis. In addition, certain state disability taxes and employee-paid state unemployment insurance taxes also self-adjust.

Sequential Master File
P20IN; The batch processing version of the Employee Database. This file contains organization and employee data, tax tables, and the object code for programs.

Service interruption
A period of time during which an employee did not maintain an active working status in the organization.

Service method
A calculation option list that determines the method for calculating credited service.

Session
When users log onto a software application, they begin a session. When they log off, they end the session.

Alternate definition: The period of time during which a class is held.

Shift
An employee schedule assignment for a given day. For a rotation pattern, this is a Sub-Schedule Number.

Alternative definition: key on keyboard, typically used to describe key combinations for a shortcut key.

Shift premium
A premium (or differential) added to an employee's regular earnings, overtime earnings, or both. It is represented by a shift code or HED Number.

Shortcut menu
A menu that appears when you right-click within The Solution Series 4. This menu contains context-sensitive commands and options that relate to the object (form, Navigator, and so on) on which you have clicked.

Sick days
The time off that an employee is allowed to take due to illness as a result of an employment contract or organizational policy.

Solution View
An online utility that provides the tools for creating new forms, fields, and report programs without the direct use of Cyborg Scripting Language.

Source DL
The node that owns the data being distributed. Depending on the rules established, the same DL can alternate from source to target.

Special assessment
Extraordinary or temporary taxes, such as additional employer-paid or employee-paid contributions to state unemployment programs or to mandatory health insurance programs.

Spinbox
A control on the interface composed of a text box and increment and decrement buttons that allow you to adjust a value from a limited range of possible values.

Spreadsheet application
Software for recording ledger entries, creating worksheets, graphing data, and other accounting functions.

Standalone Time and Attendance
Customers who are using the Cyborg's Time and Attendance Administration but not the Cyborg's Payroll Administration.

Static data
Includes organization and employee information, such as name and salary.

Static SQL
Data Definition Language (DDL) and Data Manipulation Language (DML) statements embedded in application programs.

Status bar
The bar that appears at the bottom of The Solution Series window. The Status Bar displays useful information, such as your current session number, the currently displayed organization and employee, and so forth.

Sub-schedule number
A two-digit numeric text box used to further identify a schedule table.

Succession planning
Finding and developing employees for placement into identified key positions that are expected to become vacant sometime in the future.

Summary page
To help you see information at a glance, eCyborg Interactive Workforce uses summary pages. The summary page displays a short view of detailed information. For example, all your emergency contacts appear on a summary page. You delete the contact or proceed to the detail for the contact from the summary page.

Summary plan
A customer-owned description of a benefits plan.

Supplemental wages
Wages that are separate from regular earnings may be classified as supplemental wages and taxed using the default method. The default method means using a set percentage specified by the tax authority. Examples of such earnings are bonuses and commissions.

Surplus
A 'surplus' is an exceeded complement position.

System administrator
An individual responsible for maintaining a multi-user computer system, including a local-area network (LAN). Typical duties include:

- Adding and configuring new workstations
- Setting up user accounts
- Installing system-wide software
- Performing procedures to prevent the spread of viruses
- Allocating mass storage space

System Control Repository
This is the file that contains system definitions for The Solution Series, (FILE01).This was formerly known as the Control File.

System Generator
A type of Report Generator that performs system functions, such as defining data elements and system messages.

Table
Contains an organization's rules and policies and controls what actions take place at the employee level.

Alternative definition: means of displaying information in columns and rows.

Table Definition Record
Table containing data about the Position Administration table records, including the location of keys to associated tables.

Target DL
The node that receives the data being distributed. Depending on the rules established, the same DL can alternate from target to source.

Task
The lowest level of organization on the Navigator or menu, generally equivalent to a form. checklist, or dialog.

Task icon
An icon denoting a task. Task icons describe the type of task, including Forms, Checklists, Dialogs and others.

Tax authority
A government agency to which an employer and employee has statutory tax obligations. The tax authorities for which you handle taxes exist at the federal, state/province, and local levels.

Tax Authority File
A Cyborg-supplied file that contains all the tax-specific information needed to calculate taxes for tax authorities. This includes wage-bracket tables for different marital statuses and information relating to allowances and standard deductions. The sources for the contents of this file are tax specifications published by the various tax authorities.

Tax code
The three-character to seven-character Cyborg-supplied reference code that identifies a tax and that serves as the link between the Tax Specification Record and the employee tax record.

Tax Maintenance File
One of the two Cyborg-supplied tax files. A Tax Maintenance File is a file issued by Cyborg in conjunction with a Tax Update Bulletin (TUB). It

contains all the tax specifications that are being updated in the bulletin, in the form of tax specification transactions. These transactions are typically used as input to the batch maintenance run in which tax updates are applied.

Tax specification

Each tax authority publishes tax specification information that specifies how each tax must be administered. This information specifies how employers should calculate taxes and how taxes should be withheld from employees (if withholding applies). The tax specifications can be in the form of tax formulas and (or) tax tables.

Tax Specification record

A record on your Employee Database that contains the tax specifications for a tax. The record contains all the information, as obtained from the governmental authority, needed to calculate tax amounts for the tax. The record may contain more than one tax; for example, US state Tax Specification records contain information for both state income tax and state unemployment insurance. Once a Tax Specification record is activated, tax specification information from the Cyborg-supplied tax files can be loaded onto the record on your Employee Database.

Tax table

A set of information required to calculate a tax, for a specific set of employee parameters. Tax tables are stored and maintained in Tax Specification records. A table typically includes wage and bracket information and data relating to allowances, such as personal exemptions and to standard deductions. There can be several tables relating to marital and resident status in a given Tax Specification record.

Tax type

This term refers to various categories of taxes, for example, income, National Insurance, unemployment, disability, Social Security (FICA-OASDI), and Medicare (FICA-HI).

Taxability

The term refers to whether an hours, earnings, and deductions amount is to be included in taxable wages to be accumulated for a specific tax. If the hours, earnings, and deductions amount is excludable, then the amount is not included in taxable wages. If the hours, earnings, and deductions amount is taxable, then the amount is included in taxable wages. The term fully excludable or fully taxable implies that more than one type of tax is being referenced, for example, state income tax and state unemployment insurance in the US.

Taxable wage base

The taxable wage base represents the maximum amount of an employee's wages on which tax is levied and after which there is no liability. A wage base in the US typically is in effect for FICA, unemployment taxes, and disability.

Tax-related Regulatory Bulletin

A TUB contains the updates to tax specifications supplied by Cyborg, consisting of a bulletin document, a tax file that contains the updated tax specifications, and a printed listing of tax specification transactions with the updates.

TDR

Table Definition Record.

Template

A basis from which to create a custom item. For example, you can use an existing Cyborg report as a template for your custom report.

Temporary password

A set of alphanumeric characters used with a user ID to limit access to a software application. The system requires that users replace their temporary password with a user-defined password within a certain number of days.

Termination

The activity of an employee no longer being employed by the organization.

Test environment

A separate organization or system partition used only for testing.

Text box

A control on the interface in which text can be entered and edited (formerly known as a field).

Text qualifier

The character surrounding an item between delimiters. All values between the qualifier are data items and are

not scanned for a delimiter. This allows a delimiter character, such as a comma, to be a valid data item. Example:

"item 1","item 2","item 3, 4 and 5"

This string contains three data items:

Item 1

Item 2

Item 3, 4 and 5

Although the third item contains a comma, it is ignored as a delimiter because it is between the text qualifier of speech/quotation marks (").

Time entry
The form in which you enter the hours worked for an employee. This was formerly known as a Time Card.

Time entry extract file
A file of time entries external to the Time and Attendance Solution that is used to feed to payroll.

Time entry validation
The Time Entry Validation/Creation program identifies and assigns an activity, for example Clock In (1), to each clock transaction (ring) when performing the validation function. Each clock transaction must be assigned to an activity, in order for time entry hours to be calculated for an employee, for a particular shift. This program validates clock transactions (rings) and generates time entries.

Timeout
The period of time that elapses before a user's eCyborg Interactive Workforce account becomes invalid because of inactivity.

ToolTip
A standard Windows control that provides a small pop-up window that provides descriptive text, such as a label, for a control or graphic object.

Top-down appraisal
Appraisal made by a supervisor or manager of an employee's capabilities. Such an appraisal is generally based on the supervisor's or manager's day-to-day observation of an employee's work performance and will usually include an appraisal interview with the employee.

Trainer
Trainers are set up on the Provider Index Form. They are instructional institutions, organizations or persons who are available to teach a training class.

Trainer code
The trainer code is a four-character value that represents a trainer. This value resides in Option List TR38.

Training area
The training area is recorded on the Class Schedule Form. It is typically defined as the section of the organization to which the training applies, such as manufacturing.

Training class results
These are the class details and absence information recorded on the Process Class Results form. Details recorded include the objectives met when taking a training class.

Training class status
The status value is updated and displayed on the Class Schedule Form. It tracks whether the training class is canceled, full or available.

Training course code
The training course code is a six-character value that represents a training course. This value resides in Option List TR33 and is associated with a course title.

Training plan
A plan of training courses that an employee will attend in the future to achieve the necessary skills to perform a job.

Training reason
The reason for training is used to identify why a training request has been made. For example, the purpose of the training to act as a refresher, to acquire new skills, and so forth.

Training request
A training request is a request for an employee to attend a specific course or class. A formal request for training is not essential. This step could be omitted and the employee could be registered directly in the course of his or her choice.

Transfer
Process of moving an employee from one organization to another organization, such as moving an applicant from the applicant organization to the active employee organization.

Alternative definition: to move data or files from one computer to another

Trend analysis
Reporting or statistics that indicate the rate of change in costs and other elements of a benefits plan.

Trigger
A set of conditions that must occur for an email or letter communication event to start. This can involve the creation, deletion, or modification of forms or checklists within the system.

Tuition reimbursement
Remuneration made to employees for tuition expenses.

Type of training request
The type of training request indicated whether the employee was required to attend the training or whether he or she asked to attend the training.

Unauthorized absence
Absences that are generally not considered paid time away from regularly scheduled work.

Underlined text
In browser applications, text that provides a link to another screen or page.

Unemployment insurance tax
A tax required by some US states to be funded by employee-paid contributions to pay all or part of the cost of unemployment insurance coverage. On the Payroll Solution, state unemployment insurance tax records are established as Type 2 taxes.

Unpaid absence
Employee absence that will not be paid by the organization. A time entry will not be created for this absence.

Upward appraisal
Appraisal that calls for evaluations by those who work under the direction of the employee being evaluated.

URL
Acronym for uniform resource locator. A standard way of specifying the location of an object, typically a web page, on the Internet. URLs are the form of address used on the World-Wide Web. They are used in HTML documents to specify the target of a hyperlink which is often another HTML document (possibly stored on another computer).

User class
Cognos Impromptu assigns security according to configured user profiles. These security profiles are configured by your Impromptu administrator.

User code
A set of characters (up to eighteen alphanumeric characters) that, along with the password, identify the user to the system as a valid user user when they log on.

The user code is case-sensitive (upper case, lower case) and must be entered using the correct case.

User defined password
A set of alphanumeric characters created by users that allows them to view and update information in a software application.

User ID
A set of characters that identify you to the software application. The application contains a list of authorized users by user ID. When you attempt to log on, the system checks the list of authorized users to determine whether you have authority to use the application.

User profile
Used for security purposes to determine what you can and cannot do while you are using the system, and which parts of the system you can access. A user profile is created and maintained for you by a Security Officer. Each user of the system will have a user profile.

Vacancy
An open position that needs to be filled, or an unfilled complement position

Vacation days
The time off that an employee is entitled to as a result of an employment contract or due to length of service.

Validation
The process where the Time Entry Validation program identifies and assigns an activity to a clock transaction (ring) when performing the validation function.

Variant forms
Method of displaying country-specific variation of Cyborg-delivered forms.

Waive
The act of choosing not to enroll in an optional benefits plan.

Warning time
Used to set a period of time after which an employee will appear on the exception report for a particular activity. A Warning condition will allow the creation of a time entry. A Reject condition will not. This is part of the Time and Attendance Administration.

Welfare benefit plan group
First level of the logical organization of welfare benefit plans in eCyborg Interactive Workforce.

Welfare benefit plan subgroup
Second level of the logical organization of welfare benefit plans in eCyborg Interactive Workforce.

Welfare plan
Any insurance or other benefit plan that provides immediate benefits to a participant—for example, medical insurance.

What-if mode
Method for processing a report that allows viewing of information without updating of employee records.

Window
A standard Windows object that displays information. A window is a separately controllable area of the form that typically has a rectangular border.

Wizard
A form if user assistance that automates a task through a dialog with the user.

Work area
The Solution Series screen. It includes the menus, toolbars, Navigator, forms area, message area, and status bar.

Work instructions
Specific tasks to be completed during the migration of data and files from test to production.

Work restrictions
Restrictions that prevent an employee from participating in specific workplace functions.

Worker's compensation
Legislation in the US that provides compensation to employees who suffer work-related injuries.

Workforce competency
The capacity of the overall workforce to perform required functions and sets of activities.

XHTML
Extensible HyperText Markup Language, used by the help pages for eCyborg.

Year End Master File
P20OUT file from the final payroll run of the year

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Contents

PART 1

Introduction

In This Section

CHAPTER 1

About This Manual

Welcome

Installation. Implementation. Administration. Three major phases of the system life cycle. As a System Administrator of The Solution Series, you will play an important role in each of these phases. This manual guides you through the tasks required to support The Solution Series from the moment installation is completed, through implementation, and through ongoing production administration.

Together with your installer, your Account Manager, and phone support, it is an important part of Cyborg Systems' Total Support Solution.

This manual has been designed to guide you through the use of The Solution Series to perform your business tasks.

This manual has been designed as a reference document. It is also used in classroom training. You will find sufficient detail for self-study, before and after classroom training.

Who should use this manual?

This manual is intended both for new and experienced users of The Solution Series.

This manual is designed to be used by a number of different users. The following users will find it most useful:

- System Administrators
  We have chosen the term 'system administrator' to mean the technical tasks required to support the ongoing usage of the system. These tasks include setting up test and production environments and applying code changes.
  Anyone responsible for these types of tasks at a site, regardless of title, should use this manual.

- Database Administrators
  The Solution Series relational and non-relational versions appear the same to end-users, and the majority of system administration tasks are the same for relational and non-

relational versions. However, there are additional considerations and tasks when using the relational version.

Database administrators, working with The Solution Series system administrators, will also find this manual useful.

- Implementation Project Leaders
  Implementation project leaders will find it helpful to read the sections on 'System Overview' and 'Data Structures and Processing Modes'. In addition, they will profit from reading the table of contents to learn of the tasks performed by system and database administrators in supporting the system.

Prerequisite skills

Users of this manual should possess a variety of technical skills, depending on the roles they will play. At a minimum, all users should have:

- Thorough understanding of the control language for their environment
- Understanding of system backups and recovery
- Ability to create environments (for testing, acceptance, production, and so forth)
- Authority to compile and link production programs

Additional documentation and training courses

The following documentation and training courses are available from Cyborg Systems to help you understand and administer The Solution Series.

Documentation

Document	Description
The Solution Series Data Model	Contains the title and description of every relational table used in The Solution Series, along with an entity relationship diagram. For every table, each column is described.

If you do not have a copy of this document, you can obtain one from Customer Support.

Training Courses

Related Course	Description
Post-Installation Considerations for The Solution Series	Delivered on-site only, this covers the basics of installing the system and familiarizes you with what has been delivered (files, job streams, and so forth), what tasks need to be completed immediately, and how to begin preparing for implementation.
Implementation Considerations for System Administrators	Delivered on-site or at the Solution Center, this one-day course provides you with the technical knowledge to implement the system.

Related Course	Description
Technical Administration	Delivered on-site or at the Solution Center, this three-day course covers everything you need to know to successfully administer The Solution Series on a day-to-day basis. Both indexed and relational considerations are covered during the course.

If you wish to attend any of these courses, contact Customer Support or visit our website www.Cyborg.com for details of course dates and availability.

Other training

If you are new to working with relational database management systems, we recommend you familiarize yourself with relational concepts.

The following Computer-based Training (CBT) courses, available from CBT Systems, are recommended:

- Database Fundamentals
- Relational Principles
- Database Designs

Note: CBT Systems is an international supplier of training solutions. For information on the CBT Systems office that services your area, contact CBT Systems in the US at 1 800 938 3247.

How this manual is organized

This manual has been organized to make it as easy to use as possible.

The manual's organization follows the life cycle of product usage—installation, implementation, and ongoing administration and maintenance. The chapters are divided into the following major parts:

Part	Chapters	Description
1. Introduction	1–3	Provides an overview of the manual and of The Solution Series.
2. Getting Started	4–5	Provides both concepts and detailed instructions for setting up your environments and considerations for securing those environments
3. Implementation	6–8	Provides guidelines and detailed instructions for supporting the implementation of The Solution Series at your site.
4. Maintaining the Production Systems	9–17	Provides concepts and detailed instructions for supporting the ongoing, day-to-day usage of The Solution Series and Reporting Administration.
5. Appendices	A–M	Provides detailed reference information

Following are descriptions of the chapters within the parts:

Part 1: Introducing The Solution Series

The chapters in Part 1 describe this manual and provide an overview of of the system and are essential for your successful understanding and usage of the system. You should read these chapters before you read any of the other chapters.

Read this chapter		To learn about
1	About This Manual	How this manual is organized and how to make the most of using the manual.
2	System Overview	A high-level overview of The Solution Series processing environments, including the files, databases, programs, interfaces, and data flows.
3	Data Structures and Processing Modes	The physical and logical data structures used and the processing modes used

Part 2: Getting Started

The chapters in Part 2 explains what to do after the Cyborg Systems' installer leaves to get started using the system and to prepare you for planning the implementation.

Read this chapter		To learn about
4	Setting Up Environments	Defining your environments. Modifying login scripts. Modifying maintenance scripts. Backup up the installation source code. Setting up your client and server.
5	Security Considerations	The security features provided. Considerations for securing the relational tables for use in third-party reporting.

Part 3: Implementation

The chapters in Part 3 walk you through the tasks required to support the implementation of The Solution Series.

Read this chapter		To learn about
6	Customization	Customization options Delivered interfaces Utilities for customization Reporting considerations Relational considerations Backup considerations

Read this chapter		To learn about
7	Data Conversion and Load	Data conversion and load process. Data mapping Data extraction and conversion methods Considerations for parallel runs and testing Relational considerations
8	Migration to Production	Moving code to production Audit trail reports Production environment follow-up

Part 4: Maintaining the Production System

The chapters in Part 4 describe the routine maintenance and administrative tasks required to support

The Solution Series in a production environment.

Read this chapter		To learn about
9	Identifying Problems and Applying Temporary Fixes	Type of temporary fixes (PTFs) Acquiring PTFs from the bulletin board Identifying changes that have been applied Backing up the System Control Repository Implementing PTFs
10	Maintaining the Client Data File	Purpose and contents of the Client Data File What impacts the Client Data File Methods for updating the Client Data File
11	Using the Backup and Restore Utilities	Utilities provided for backup Recommendations for system backups and restores
12	Maintaining Cross-Reference Keys	Purpose of phonetic keys Maintaining phonetic keys Purpose of alternate keys Maintaining alternate keys
13	Running Report Options	Query reporting (online and batch) Scheduling reports Initiating a report run in batch Initiating a report run online
14	Managing Working Storage	Size of delivered working storage areas Methods for expanding or contracting working storage areas Methods for expanding working storage areas for relational databases

Read this chapter		To learn about
15	Synchronizing Relational Tables and Indexes	Utilities provided for synchronization of relational environments
16	Performance Tuning for Relational Databases	Impact of using dynamic versus static SQL Converting dynamic SQL to static SQL using the Case tool Methods for improving pay extract and pay merge run times
17	Administering Reporting Administration	Backing up Reporting Administration components Selecting the extract components Extracting core system data Extracting Labor and History data Recovering Labor and History extract

Part 5: Appendices

The appendices in Part 5 contain quick reference information and practice and review answers:

Use this appendix		To learn about
A	Working Storage Expansion Worksheets	Blank worksheets you can use to help determine your working storage needs.
B	Relational Tables and Views	Quick reference of the content and structure of the delivered relational views.
C	Operating System Codes	Quick reference of unique codes that distinguish your environment.
D	Object codes	Quick reference of unique codes that identify records in the System Control Repository to be processed.
E	Record Key Structures	Quick reference providing detailed format and usage information for each record type in the System Control Repository and Employee Database.
F	System Files	Quick reference providing detailed format and purpose information for general Solution Series system files.
G	Payroll Process Files	Quick reference providing detailed format and purpose information for files used in the batch payroll process.
H	Naming Conventions	Detailed program naming standards to help you identify programs, as well as name any customizations.

Use this appendix		To learn about
I	Report Quick Reference	Quick reference information about reports covered in this manual.
J	Program and Utility Quick Reference	Quick reference information about utilities and programs covered in this manual.
K	Analyzing and Editing the Difference File	Guidance on what to do with the content of the Change Control Facility (MAINTO) output.
L	Disk Requirements Worksheets	Worksheets for calculating the amount of disk space required for relational databases.
M	Accessing PTFs on the Cyborg Users' Bulletin Board (CUBBS)	Step-by-step instructions for locating and downloading PTFs from the Cyborg Users Bulletin Board System.
N	Practice and Review Answers	Answers to the Apply the Concepts and Questions Answered questions

How to use this manual

This manual has been designed as a reference manual as well as a training manual. It has been written to facilitate self-study before and after classroom training.

Table of contents

The manual has been carefully designed for ease of use. All our manuals are written to be task oriented to help you complete your business tasks using our software.

The table of contents lists all the tasks and their respective chapters.

Glossary of Terms

A Glossary of Terms section is provided to explain terms used in the documentation.

Index

An index is provided to help you locate specific information.

This document was designed to reduce your need for an index. You should find the table of contents sufficient.

Introductory chapters

It is important that you read the introductory chapters first. Chapter 1 ensures you get the most out of the information we have provided. Chapter 2 provides a high level overview. Read it to get the big picture before reading the detailed instructional chapters.

Instructional chapters

All chapters, other than the introductory chapters, are instructional chapters. They contain detailed instructions on how to complete the business tasks. Each instructional chapter has the following distinct sections:

Key Concepts

Always read the conceptual information first. This will help you understand why you have to perform certain tasks. It will also help you make decisions about your options and help

you understand the importance of performing certain tasks. Exercises to help you apply the concept to a business task are included at the end of most concepts.

Apply the Concept

To be certain that you have understood the key concepts in a chapter, complete the Apply the Concept exercises provided. The answers to these exercises can be found in the appendices.

Detailed Directions

When you are ready to perform a task, review the Detailed Directions, which provide guidance, as well as the specific steps, to complete a task.

Guided Practice

The Guided Practice within the Detailed Directions offers you an opportunity to practice a task with step-by-step instructions. It takes you through the various steps, providing detailed examples so you can gain a comfort level with the task. Guided Practice is easy to locate.

For practice, type 'ABC Solutions'.

Note: To successfully follow the Guided Practice, you must have completed all the previous Guided Practice exercises in the manual. The Guided Practice uses the test data installed with our software. For the Guided Practice exercises to work, this test data must not have been altered.

All users who complete the Guided Practice must either have their own copies of the test data or have the test data restored for them.

Extended Practice

To be certain that you have understood the tasks in a chapter, complete the Extended Practice provided. The Extended Practice gives you the opportunity to complete one or more tasks without step-by-step guidance. The answers to these exercises can be found in the appendices.

Note: To be able to complete the Extended Practice exercises in the manual, you must have completed all the previous exercises. You must also be using the test data delivered with the software. This test data must not have been altered.

Review of Questions Answered

To be certain that you have understood all of the information in a chapter, complete the review questions provided at the end of a chapter. The answers to these questions can be found in the appendices.

Conventions used in this manual

The underlying page layout and design of this manual are meant to be as intuitive as possible for you. Our intent is to make it easy to navigate through the manual and concentrate on learning and doing.

Cross-references

Wherever appropriate, we provide cross-references to help you find additional information or further discussion of a specific topic.

☞ *Refer to a cross-reference to find more detail or more discussion on a given topic.*

Notes

Whenever there is important information you should be aware of, we provide a note.

Note: You will find tips or quick techniques covered in notes.

How to get additional help

If you can not find the answers to your questions in this manual, contact Customer Support, who will be able to answer specific questions and give you general advice on training.

Please visit our web site ***www.Cyborg.com*** (see "Cyborg Home - http://www.Cyborg.com") for the latest schedule of available courses and course descriptions.

Suggestions and feedback

We value your feedback on our performance support materials. Please forward any comments on this manual to Customer Support.

CHAPTER 2

System Overview

In This Chapter

Introduction

This section provides an overview of The Solution Series. It is about 'what', not 'how'. It provides you with the background required to plan and to administer the system. The topics introduced in this section are explained in more depth in later sections. Because it introduces many important concepts, you should read this section before proceeding to the procedural sections.

Questions answered in this section

This section answers the following questions:

1. What is The Solution Series?
2. What are the components of The Solution Series?
3. How is the system organized?
4. What programs, languages, and tools does the system use?
5. What security options are available?
6. What customization options are available?
7. What reporting options are available?
8. How is the system maintained and upgraded?

What is The Solution Series?

The Solution Series is Cyborg's 'best-in-class' human resource management system (HRMS) offering comprehensive human resource management, payroll processing, and time and attendance functionality. Starting with Versions 4.5 and 4.0, Windows 98 compliant GUI, web enablement, *Employee Self-Service* (called eCyborg Interactive Workforce in The Solution Series version 5.0), Workflow, and comprehensive reporting and data analysis capabilities were added.

The Solution Series is designed to grow and to change with you and your organization. You can choose from a variety of configurations and be assured that the core system functionality will remain the same. Later, if you change configurations, you will not have to retrain your staff—the system will function and appear the same.

Relational and indexed versions

You have a choice of using a relational or an indexed version of The Solution Series.

Relational version

The Solution Series relational version contains the same functionality as the indexed version, plus the capability of reporting on application data using SQL-based third-party software. The differences between the relational and the indexed versions of the system are transparent to the end user.

The following RDBMS packages are currently supported:

- Microsoft's SQL Server
- Oracle

All SQL Data Definition Language (DDL) and Data Manipulation Language (DML) statements are generated for you. Because of the intelligent messaging process used, the SQL dialect of your RDBMS's operating system is used.

Indexed version

If you do not want to use a relational database, you can choose the indexed version of The Solution Series. The indexed version is functionally identical to the relational version of the system.

The indexed version uses indexed sequential files to store the business rules, application programs, and the company and employee data.

Client interface

By separating the application code from the business rules and providing an 'auto-synchronization' mechanism, The Solution Series ensures that all client machines are processing at the same level and applying the same business rules.

The Solution Series components

The Solution Series provides an integrated solution to your organization's human resource processing needs. You can think of these components as being divided into two categories—application and data.

Application components

The Solution Series offers the following application components:

- Human Resources Administration
- Payroll Administration
- Time and Attendance Administration
- Position Administration
- Requisition Administration
- Distributed Administration
- Reporting Administration
- eCyborg Interactive Workforce

The Human Resources Administration

Human Resources Administration provides organizations with a comprehensive, strategic solution to their human resource management requirements in these mission-critical areas:

- Human resource record keeping
- Benefits administration
- Salary administration/budgeting
- Workforce planning
- Training administration
- Succession planning
- Applicant tracking
- Position Administration
- Employee/labor relations
- Employee Health & Safety
- EEO/Affirmative Action
- Attendance tracking/absence management
- Reporting and online Query

Payroll Administration

Payroll Administration provides the capability to internally manage the entire payroll and taxation process. The regulatory compliance, integration of payroll data with other applications, and control provide a solution for business operations of any size.

Payroll Administration provides a variety of features including the following:

- Virtually unlimited earnings and deductions
- Comprehensive tax processing and reporting
- In-depth labor distribution
- Bank services
- Complete online payment history tracking
- Online pay calculation
- Online retroactive pay calculation
- General ledger interface

Time and Attendance Administration

The optional Time and Attendance Administration provides a table-driven data structure that gives users the flexibility to quickly and easily define, maintain, and change policy and scheduling rules. Its open design allows a wide choice of:

- Time entry methods
- Computing platforms
- Payroll interfaces

The system calculates all categories of hours for input to the payroll process, based on company-defined pay policies. Time cards for special hours may be created online.

Because Time and Attendance Administration is an integrated component of the system, it shares a common database, and has access to human resource information including employee status, emergency contact data, work restrictions, injury and other medical information, education and training, skills and abilities, and detailed termination data.

The Position Management Solution

Position Administration provides a flexible and easy way to manage the Positions in your organization. Related items such as Jobs and Position incumbencies are also recorded and tracked. You can also record and track the attributes of all levels (different departments, divisions, and so forth) in your organization.

Position Administration provides you with a highly flexible system that can manage the most complex or the most straightforward organization structure. It allows the detailed definition of Organization Units, Jobs, Positions, and single or multiple Incumbencies.

The Requisition Tracking Solution

Requisition Administration makes it easy to track new hires and transfers that may take place to fill vacancies in your organization. This component is a standard addition to The Solution Series.

Requisition Administration allows your organization to fill vacancies with candidates who are existing employees, applicants, or walk-ins. If you wish to record only the applicant's name and position applied for, you can do so in Requisition Administration without having to use Applicant Tracking screens.

The system keeps a record of Requisitions (formal requests to fill vacancies). It then tracks the progress of Requisitions, alerting you when a request has been fulfilled and preventing further candidates from being hired or transferred.

Distributed Administration

Managing employee-related information and complying with more complex and demanding governmental personnel and payroll regulations have become great challenges for organizations. Controlling information and minimizing exposure to regulatory compliance issues require that an expansive volume of employee data be accurately collected, maintained, analyzed, audited, reported, and made available for use in a timely, cost-effective manner.

Distributed Administration provides a means of capturing data created and revised at remote locations and sharing those changes dynamically with other sites. This allows multiple sites to simultaneously run The Solution Series while dynamically updating remote data and receiving updates to their local data.

Unlike other distribution processes, Distributed Administration does not require master/slave relationships. This process supports peer-to-peer, hierarchical, and specialized server topologies where bi-directional replication is based on user-defined data sharing decisions.

Distributed Administration employs a 'store and forward' data sharing technique, in which The Solution Series human resources and payroll changes are collected real-time and placed in a holding file. Data can be filtered from the holding file and distributed on a daily or more frequent basis. Additionally, the holding file acts as a recovery facility, permitting re-extraction of previously transmitted data and resubmission to a requesting site.

Reporting Administration

Reporting Administration provides everything you need to perform easy and meaningful reporting on your organization's data. Cyborg has successfully integrated all the pieces necessary to deliver a full-featured turnkey reporting solution. It is easy to use and incredibly powerful.

The Cognos Impromptu reporting tool is an integrated part of the Reporting Administration. It makes on-request reporting for data extracted from The Solution Series easy.

The Solution Series provides the value-added capability to easily extract data and load it into a data mart. You can set up an extract schedule based on regular monthly or weekly data requirements or request an immediate data extraction.

The data mart created during the extraction process seamlessly integrates with the Cyborg catalog used by the Impromptu reporting tool. You can run existing reports against the data displayed in the catalog, or you can create new reports containing your data selections from the database in the catalog.

The ESS Solution

If you have applied the 4.5.1 Service pack, your installation of The Solution Series is 'eCyborg Interactive Workforce-ready'.

eCyborg Interactive Workforce is a member of Cyborg's family of web-based applications for HR management. It has been developed by Cyborg Systems to integrate seamlessly with The Solution Series.

eCyborg Interactive Workforce is a web-based employee self-service application that gives your employees real-time access to view, add, and update their personal information held within The Solution Series via a user-friendly, web-based interface.

eCyborg Interactive Workforce does not display the forms used in The Solution Series; rather, eCyborg Interactive Workforce presents web pages on which users enter or update information.

Communication between the eCyborg Interactive Workforce and The Solution Series is performed via an application programming interface (API), which allows two software applications to pass information to each other.

☞ *Please refer to the eCyborg Interactive Workforce: Technical Implementation, Technical Overview, for additional information on the software and hardware components.*

eCyborg Interactive Workforce functionality

The eCyborg Interactive Workforce functionality is delivered in modules, allowing flexible implementation. Currently there are two modules:

1. eCyborg Interactive Employee
2. eCyborg Interactive Benefits

Each module contains both user functions and the administrative functions needed to implement the business rules specific to your organization.

You can implement eCyborg Interactive Employee independently of eCyborg Interactive Benefits. However, if you want to use eCyborg Interactive Benefits, you must also implement eCyborg Interactive Employee.

☞ *Refer to eCyborg Interactive Workforce documentation for more detailed information on the configuration and use of eCyborg Interactive Workforce.*

Data components

The Solution Series contains the following data components:

- Database
- Data dictionary
- Application Programming Interfaces (APIs)

The database

The Solution Series integrated database is shared by all of the system components. The indexed database consists of the following main files:

File	Description
System Control Repository	Contains the business rules for processing data, the data dictionary, and program code.
Employee Database	Contains the company and employee data, time entries, tax information, and audit trails. It also contains executable versions of the program code from the System Control Repository.

In the relational version of the system, the data dictionary on the System Control Repository is replicated in relational tables; the Employee Database contains the Organization Control Number and the Employee Number.

File	Description
System Control Repository	Contains the business rules for processing data, the data dictionary, and program code.
Employee Database	Contains the audit trails and executable versions of the program code from the System Control Repository.
Database	Contains employee and company records, time entries, and tax information.

The data dictionary

The System Control Repository contains an active data dictionary which includes the Field Name Table and Field Table Menu records. It defines each data entity and its attributes. Additional utilities are provided that show every form, report, query, data extract, or background transaction where a data element is referenced.

In the relational version of The Solution Series, the CASE tool (RDBPGM0) uses the Field Name Table to automatically generate the appropriate SQL data definition language (DDL) to generate the database and the relational tables. In addition, it generates the data manipulation language (DML) to process the data within these tables.

Application interfacing options

The Solution Series provides a variety of standard application interfaces for regulatory reporting. In addition, you can create custom application interfaces.

☞ *Refer to* **Customization** *(on page 107) for a discussion of interfaces.*

Processing modes

The Solution Series runs in both online and background processing modes.

Online processing mode

Online processing is the procedure of entering, viewing, or manipulating data through an interactive Solution Series session.

When entering data online, data is updated in the database instantly. All verification is also performed instantly. If an error occurs, a corresponding message will be displayed with additional information.

Background processing mode

You can think of The Solution Series as having two types of background processing—Solution Series background processing and payroll background processing.

- Background processing is the procedure of grouping a number of tasks to be accomplished in a background mode. Processes are executed to read from or write to the online files—System Control Repository, Employee Database, and Client Data File.
- Payroll background processing calculates the payroll. In this mode, processing is run against a sequential Employee Database to reduce processing times.

Refer to **Data Structures and Processing Modes** *(on page 45) for a more detailed discussion of processing modes.*

Main files and their contents

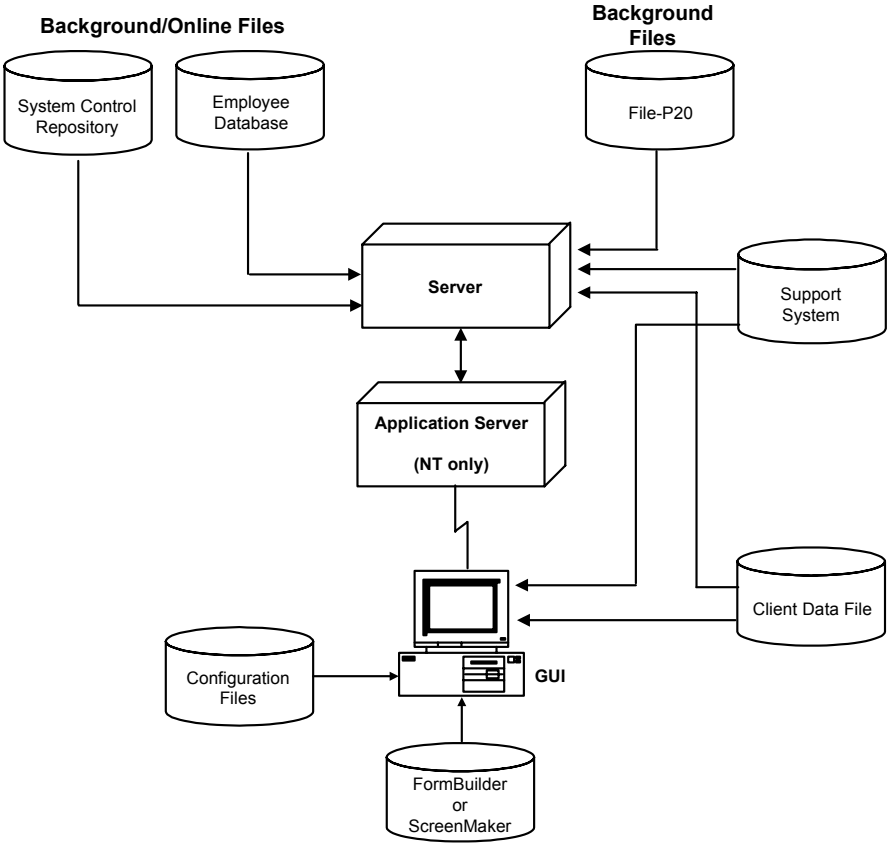
Online files

The online files contain the data you want to view or update. There are several main online files:

- System Control Repository (FILE01)
- Employee Database (FILE02)
- Client Data File (FILECL32)
- Help files

The System Control Repository and the Employee Database are stored on the central processor (server) and accessed via the network. The same System Control Repository and Employee Database are used by all of The Solution Series applications.

The Client Data File is stored on each user's workstation. Help files are stored on each user's client workstation.



System Control Repository

The System Control Repository (Control File; FILE01) is composed of 80-character records that contain programs and information for validating data that you enter online. Some of the elements on the System Control Repository are as follows:

- Data dictionary
- Menus
- Forms
- Programs
- Option lists (formerly codesets)
- Tables
- Alternate keys
- 'Other' records
- Universal checklists

Employee Database - System Overview

The Employee Database (Master File; FILE02) contains several types of information, including the following:

- Company information
- Employee information
- Statutory rates and limits
- Executable versions of System Control Repository programs
- 'Other' records

There is a variable length record for each organization and each employee within that organization. Employee records are ordered by organization and Employee Number. Each organization is referred to as a Control 1-2 (Organization Control Number).

Database and file structure

To support access to the data by third-party reporting tools, application data is stored in standard, relational tables. These tables are initially created during the installation of The Solution Series.

The following table contrasts the location of the data in the relational and indexed versions of The Solution Series:

Data	Relational version	Indexed version
Application tables	System Control Repository and relational tables	System Control Repository
Option lists	System Control Repository and relational tables	System Control Repository
Company data	Relational tables	Employee Database
Tax data	Relational tables	Employee Database
Employee data	Relational tables	Employee Database
'Other' records	Relational tables	Employee Database

Naming conventions

Relational tables are named using up to 18-character names. For example, the EMERGENCY_CONTACT table contains the name and contact information for the person the employee designated as the one who should be contacted in an emergency.

☞ *Refer to* **Data Structures and Processing Modes** *(on page 45) for more detailed information on each of these files.*

☞ *Refer to* **Relational Tables and Views** *(on page 403) for a complete list and description of the relational tables.*

The Client Data File

Information in the Client Data File is replicated from the System Control Repository.

The Client Data File is updated only with data that is needed by the user. If a user logs into the system for the first time, and no Client Data File exists, the system will give the user the option to automatically build one or log off and contact the System Administrator.

The Initial Client Data File will be built containing the following:

- Security Records
- Events Details
- Field names (only if the user is a developer)
- The first line (000000) of the program for every EL program/form

As the user enters a form for the first time, there may be a slight pause as the Client Data File is updated with the following details:

- Option lists specific to that form
- Field names specific to that form (if the user is not a developer)
- The SAT details for the form

The first time the user calls a Position Administration form, Position Administration data will be downloaded.

The first time the internal report scheduler is called all report parameter details and the header line of each report program is downloaded.

☞ *See* **Maintaining the Client Data File** *(on page 247) for more information on keeping the System Control Repository and the Client Data File synchronized.*

Help files

The help files contain field level and form level help for each form, as well as conceptual and task-based information. You access this help by using the Help button or by pressing the F1 key.

Background file

Batch Master File---P20

This is the background equivalent of the online Employee Database. During payroll processing, data is transferred between the online Employee Database and the sequential

batch master file (P20). This file also contains the Report Generators used in the payroll cycle to determine the output from the payroll process, either files or reports.

This file can be updated by a Payroll Process run.

Programs, languages, and tools

Application programs

Online application programs (Human Resource, Payroll, Time and Attendance, and utilities) are coded in the Cyborg Scripting Language (CSL), Cyborg Systems' proprietary scripting language. It is generic to the operating system environment. You can use CSL to enhance or to modify the system.

(CSL was formerly known as English Language or EL.)

GUI presentation program

The GUI presentation program delivered is CSSS32.EXE.

Core programs

Following are the operating system-specific, core programs delivered with the system. They are coded in COBOL.

CBSVO

This online program allows real-time, interactive reading and updating of the two main Solution Series files—the System Control Repository and the Employee Database.

CBSVOT

This is the trace version of the CBSVO online program. The program provides information for debugging purposes.

CBSVB

This is the background processing program used to produce reports and to access or maintain The Solution Series files off-line.

CBSVBT

This is the trace version of the CBSVB background processing program. The program provides information for debugging purposes.

CBSVRFT

This is the subroutine used in non-relational installations to determine segment and segment key lengths.

☞ *See the discussion of* **the CASE tool** *(on page 130) in Customization for a description of RDBPGMH, which performs this function in a relational installation.*

CYBIO (The Solution Series/ST 4)

For *The Solution Series/ST*, this program processes input/output requests for the System Control Repository.

Cyborg Scripting Language programs

Cyborg Scripting Language programs are used to display, report, and manipulate the data and components of The Solution Series including online forms, packaged reports, and utilities.

Payroll process programs

The following COBOL programs are used only in the payroll process. If you are not a payroll user, you will not use them:

- P2EDIT
- P4CALC
- P5PRNT
- P9CNVT
- O4CALC

☞ *See the payroll technical documentation for more information on these programs.*

Report generator (RG) programs

Report generators are used only in the background payroll process and online pay calculation. You can customize them to enhance the system.

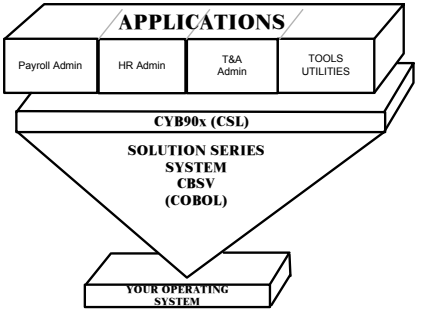
COBOL/Cyborg Scripting Language relationship

The Solution Series COBOL (CBSV) programs execute Cyborg Scripting Language code and perform the requested functions.

To explain the relationship between The Solution Series CBSV programs and Cyborg Scripting Language, consider the following analogy:

- The Solution Series CBSV programs act as a virtual computer, performing the functions requested by the Cyborg Scripting Language object code.

- The Cyborg Scripting Language program CYB90x acts as the operating system for The Solution Series. CYB90x reads the command (or control record) and turns control over to the requested CSL application or utility program. When the CSL program is finished, control is passed back to the CYB90x program.



The CASE tool

If you are using the relational version of The Solution Series, you will make use of the CASE tool, RDBPGM0. This COBOL program generates the data definition language (DDL) to define the relational database and tables (with associated indexes and views) from The Solution Series Field Name Table.

In addition, it generates the data manipulation language (DML) to process the data within these tables. All generated DDL and DML use embedded, static SQL.

After the installation, you will use the CASE tool after you:

- Complete modifications to existing data definitions in the System Control Repository
- Alter a delivered table in the System Control Repository
- Convert generated dynamic SQL to static SQL

☞ *Refer to Customization for detailed information on* **the CASE tool** *(on page 130).*

About Client/Server

Data accessibility from anywhere in the organization and increases in end user productivity are perhaps the strongest benefits of client/server computing.

The client/server implementation decisions you make must ensure that these benefits are realized. Your decisions must also be flexible enough to withstand the growth or restructuring of your organization and the ever changing improvements made in computer hardware and software.

Client/Server objectives

Objectives for client/server implementations vary by audience. Successful client/server objectives meet both the business and technical objectives of an organization.

Business objectives

Client/server implementations typically include the following business objectives:

- Provide solutions to business requirements
- Provide user control of processing
- Provide flexible processing options
- Provide accessibility to data for reports and queries
- Provide a graphical user interface
- Provide integration with desktop tools

Technical objectives

As a technician, you also need to ensure the client/server implementation solves the business needs. However, you also have another set of objectives. For you, the client/server implementation should be open and scaleable.

For you, the client/server implementation should:

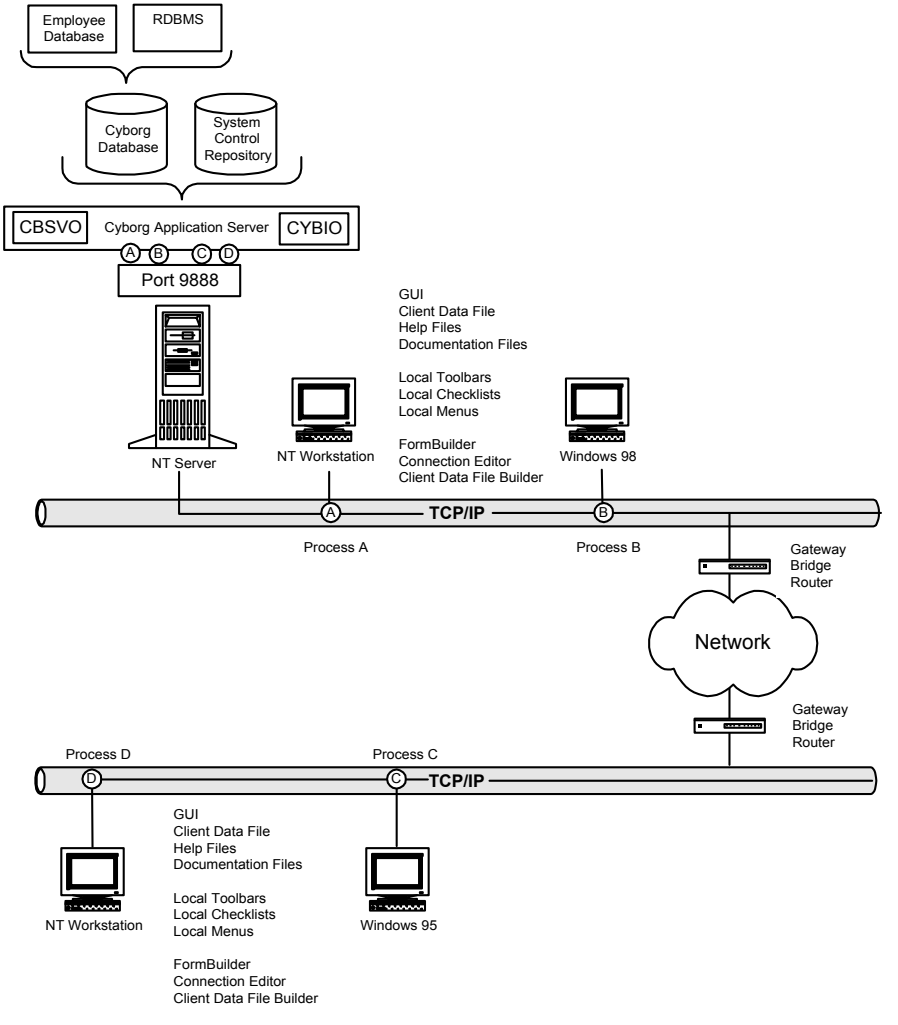
- Use a second generation client/server architecture
- Be effective and efficient
- Minimize risk
- Capitalize on existing infrastructure and skills
- Protect the hardware and software investment

This section will demonstrate how The Solution Series meets these objectives by discussing the key technical components of a successful client/server implementation, and by answering frequently-asked questions about client/server computing.

Key technical components

As we discuss the key technical components, we will highlight different sections of the figure below.

This figure shows various components that may be included in an NT relational configuration:



The client

The client is the end user's world. It contains the presentation layer of the application. By definition, a client is a system or program that requests activity of one or more other systems or programs (servers) to accomplish specific tasks. In addition, the client shares processing with the server.

Client files

The Solution Series on the client includes the following files:

- Graphical User Interface executable (Csss32.Exe) launches an online session of The Solution Series.
- FormBuilder executable (FormBuilder.EXE) launches the application used to create and modify Solution Series form appearance table (SAT) files.
- Client Data File (Filecl32) contains some duplicate information from the System Control Repository needed for editing and validation of field data.
- Workstation Environment File (Cyb.Cfg) contains the workstation environment detail. It is updated by the Connection Editor tool (Cybcfg.Exe), also located at the client.
- Client Data File Builder executable (BuildFilecl32.Exe) takes the output file from the batch Export Client Data File utility (MAKECL) and creates a new Client Data File.
- Menu File (Menus.Dat) contains menu records and bitmaps.
- Checklist (*.LCL) files represent user checklists created for ease of use or workflow efficiency.
- Toolbar File (*.TB) contains toolbar records for custom toolbars added to the configuration.
- Documentation files (*.PDF) can be accessed from the Cyborg Support system. You can read, search, or print these Adobe Acrobat files. These files represent the entire Cyborg Systems One-Stop Documentation library.
- Help files (*.HLP) and their accompanying support system files (*.CNT, *.DLL, and so forth) contain just in time information you can access context-sensitively (get help for the form you are on or the field on which your pointer rests by just clicking once). These files are also accessed when you look for more information on a task or concept from the Cyborg Support System.
- HTML compiled help file (emaillet.chm) contains information on completing an email or letter communication event and is displayed as part of the Modify Communication Event dialog.

Minimum client system requirements

Refer to the installation guide for your Solution Series version to determine the recommended hardware configuration.

The server

The server contains the application logic and the data for the applications. You can have application servers (application layer) and, optionally, database server (data access layer).

Application servers

The database files, the System Control Repository and the Employee Database will reside on the server. When requests for data are made, data will be transferred to the client.

Database servers

If you use the relational version of the system, your implementation will include a database server. In The Solution Series, the data dictionary (F and RFM records) from the System Control Repository is replicated in relational tables. The actual company and employee data are stored in relational tables.

Relational database management systems offer accessibility to data by end users using third-party reporting tools.

The following RDBMS packages are currently supported:

- Microsoft's SQL Server
- Oracle

Minimum Server System Requirements

Refer to your platform-specific installation guide for details on system and software requirements for the server.

Communication between the client and server

The crux of a client/server implementation is communication—communication between the client and the server. The Solution Series makes use of industry standard inter-process communications between the presentation, application, and data access layers.

Intelligent messaging

The Solution Series is a thin client application. A thin client only transfers the data required to complete the task requested by the user.

The Solution Series issues native calls on the server that are invoked as a result of an inter-process message being passed from the application on the client to the application on the server. This technique provides for more efficient processing, the ability to take advantage of unique features of each database management system, and the elimination of gateways and middleware required to do translations in order to access the target database. The Solution Series speaks directly to the target relational database in the SQL dialect of the relational database management system.

Cyborg Application Server

The Cyborg Application Server (CAS) is a server that provides network transparency of clients for server applications. It allows an existing application, such as CBSV, to become the server in a client/server architecture without any modification to that application.

The client connects to CAS across the network via TCP/IP. The client is fully aware of CAS and sends requests and receives responses via messages. Among other things, these messages ask CAS to start the server application, send input to the server application, and receive responses from the server.

CAS supports multiple server applications on a single system. Many clients can be connected to a Cyborg environment via CAS at the same time. Furthermore, CAS supports multiple environments on a single server. Each client can run any number of server applications available to it.

About security

This section presents a brief overview of the security options available with The Solution Series.

Security within The Solution Series/ST

Security can be granted or denied, with view and update restrictions, by the following areas:

- application area
- specific parts of the company
- specific forms
- specific data elements
- specific values within a data element

The Security Officer

At each installation, a Security Officer must be appointed. This individual has full responsibility for establishing, controlling, and monitoring all levels of security and access. The Security Officer is given a system-delivered password and operator ID.

Security reports

Any attempted breach of security is immediately logged in the Security Violation Log available only to the Security Officer.

Security for third-party reporting

Accessing the relational tables using a third-party reporting package entails additional security considerations. The Security Officer, together with the database administrator, must implement a plan to secure the relational tables from unauthorized access.

☞ *Refer to* **Security Considerations** *(on page 97) for more information.*

About customization

The Solution Series provides a variety of customization options. The complexity of the changes you want to make and your level of technical expertise determine which methods you will use for customizing the system.

Customization options

The following customization options are available:

- User interface utilities
- Option lists
- Application tables
- Tools—Solution View and FormBuilder
- Cyborg Scripting Language (Cyborg's scripting language)

User interface utilities

You can quickly and easily make changes to the user interface using the following customization options:

- Customize launch bar
- Customize menus
- Customize checklists
- Customize user options
- Customize security profiles

Option lists

Option lists are tables of valid field entries (codes) and associated descriptions. When application users choose a description entry for a field, the associated code is stored in the employee's record. You can add or delete option list entries, or modify their descriptions to suit your needs. Several standard option lists are delivered with the system. For example, the Hire Source option list contains the following values:

Code	Description
01	Employment Agency
10	Adv. Natl. Bus. Wkly.
20	Walk In
30	Employee Referral
31	Employee
40	Recruit College

Application tables

Most application tables contain standard information about your organization. A few application tables, such as the Company Cross-Reference Table-HR Control Numbers, are used strictly for internal processing.

Using application tables greatly reduces the amount of information to be keyed in for an employee; instead, key data entered is cross-referenced to the tables. For example, the Job

Code Table contains all possible jobs for an organization and some generic job-related information associated with those jobs. After validation, the information from the tables is referenced by the employee record.

There is an application form associated with each table, allowing you to view or modify information. You can also run batch reports showing the values for each table.

Solution View: creating forms and fields

Solution View's form design and creation facilities can be used to create new company or employee-level forms and data fields incorporating your organization's requirements.

A new form can incorporate any data from the Employee Database and/or user-defined fields.

A new field is defined by specifying its:

- Name
- Length
- Type (alphanumeric, numeric, date, timespan)
- Key indicator
- Option list (optional)

Field definitions, new records, and scripting language code are generated from the information entered online. The generated code is automatically compiled—no manual intervention is required. The new form or field is immediately ready for use.

FormBuilder: customizing forms

FormBuilder allows you to customize the appearance of existing forms or new forms (created with Solution View) in a drag-and-drop environment. Because the definition for each form's appearance is stored in The Solution Series Form Appearance Table (SAT), no scripting is required to customize the appearance of a form, and no changes are made to the underlying system programs or to the Employee Database. For example, you can do the following:

- Add fields to forms
- Eliminate unused fields from forms
- Rearrange fields on a form to match data entry patterns
- Modify labels to incorporate your organization's terms

Standard Windows features such as push buttons, radio buttons, and check boxes can be defined by simply responding to prompts in a dialog box.

Typically, FormBuilder is used to design forms. Once the form design is approved, the form is implemented using utilities and Cyborg Scripting Language.

☞ *Refer to the FormBuilder (previously ScreenMaker) documentation in the Online Cyborg Scripting Language/English Language Programming guide for more information.*

The scripting language

As an alternative to using Solution View, you can directly modify The Solution Series objects or create new objects using the Cyborg Scripting Language (CSL). Many technical users use CSL (formerly English Language) to create forms and reports.

CSL is a fourth-generation, procedural language. It uses 'English-like' verbs, such as READ and MOVE.

A full-form editor, EDIT, is provided for modifying and creating CSL programs. EDIT provides standard commands and utilities for modifying programs, such as A(dd), C(hange) and D(elete). You access EDIT from within The Solution Series.

After a program is modified or created, you compile it using the RELOAD utility.

☞ *Refer to the Cyborg Scripting Language documentation for more information.*

About reporting

The Solution Series offers the following reporting options:

- Online query and custom reporting
- CSL reporting
- Third-party reporting

Online query and custom reporting

Using Solution View, you can easily create online queries, reports, and extract files in an online, interactive 'question and answer' session. Solution View is a standard component of The Solution Series, and provides instant access to data across all system components. Of course, the system's comprehensive security will restrict the data on which you can query and report.

With Solution View, you have the ability to specify data fields to be displayed and a comprehensive range of mathematical operations to be utilized. Selection criteria includes point-in-time reporting and literal comparisons.

If you prefer, you can run queries in batch mode to receive a printout of the query response.

Extracting data

Just as easily as defining a query or report, you can use Solution View to produce an extract file of data to use as input to another application.

CSL scheduled reporting

The Solution Series is delivered with a variety of standard and regulatory CSL reports along with utilities to automate the reporting process. Any reports created with Solution View can also be scheduled.

Standard Reports

Each application comes with a variety of standard reports. These reports are coded using the Cyborg Scripting Language and can be modified.

Report Groups

Using report groups, you can set up a schedule identifying:

- What report(s) should be run.
- Run-time selection parameters.
- What organizational structures' data should be included on a report.
- Which employees should be included in a report. Employee selection includes 'as of' dates and date ranges.

Viewing held reports

The View Held Report program allows you to view, print, and/or delete the batch reports and queries routed for online viewing. For each report, you will see the number of pages, the date the report was created, and the time the report was created.

This allows you to preview reports prior to printing them.

Payroll reports

You can generate payroll reports in maintenance runs or in standard pay runs. There is a separate report group for payroll reports.

☞ *Refer to* **Running Report Options** *(on page 275) for more information.*

Third-party reporting

If you are using the relational version of The Solution Series, you have the option of using SQL-based, third-party software to interrogate the relational tables.

Reporting Administration

The eCyborg Interactive Workforce offers a third party reporting tool used by customers using the relational version of The Solution Series. Built upon the powerful business intelligence capability of Cognos' Impromptu, the eCyborg Interactive Workforce automatically creates a data mart from live data in The Solution Series. The data mart tags all data with effective start dates and end dates and stores data in a format ready for reporting, providing powerful point-in-time reporting capabilities.

☞ *Refer to* **Administering Reporting Administration** *(on page 367), in this guide for more information on Reporting Administration.*

Using reporting packages

You can use any SQL-based tool to report on The Solution Series relational tables, which allow you to interactively work with data to access any of the RDBMS supported. End users may create reports by simply pointing and clicking on icons or menus. Technical users may write reports by using SQL directly.

About maintenance

Periodic updates and temporary fixes are distributed on Cyborg Systems' bulletin board (CUBBS).

The bulletin board

Cyborg Systems maintains an electronic bulletin board system for communicating with customers. Bulletins, minor enhancements, and program fixes are distributed on this bulletin board. You should periodically review the information on this board to determine what solutions apply to your site.

For details on using the Cyborg Systems' bulletin board, refer to the instructions sent to you.

Enhancements and bulletins

Between releases of The Solution Series, enhancements, and some bulletins, are released to meet customer needs. Depending upon the size of the bulletin, other distribution media may be used.

Enhancements and bulletins obtained from the bulletin board generally contain the following files:

- Code file containing the actual code changes
- Solution Series Form Appearance Table (SAT) changes
- Documentation file containing an explanation of the code changes

Temporary fixes

Temporary fixes, or PTFs, are resolutions to Problem Notifications (PNs). PTFs are distributed on the bulletin board.

☞ *Refer to* **Identifying Problems and Applying Temporary Fixes** *(on page 205) for more information.*

Maintenance utilities

The Solution Series provides utilities for applying periodic updates, temporary fixes, and new releases. There are also utilities available for general maintenance, including backup utilities.

☞ *Refer to* **Program and Utility Quick Reference** *(on page 491) for more information on utilities.*

Relational database considerations

It is essential that the referential integrity of the database tables and the System Control Repository and the Employee Database be maintained.

- In the relational version of the system, option lists and certain application tables are stored both on the System Control Repository and as relational tables. To synchronize

the System Control Repository and the relational tables, you use the Build/Rebuild Control File Relational Tables (POPF01) utility.

- You should backup the System Control Repository, the Employee Database, and the database tables simultaneously.

☞ *Refer to* **Synchronizing Relational Tables and Indexes** *(on page 337) for more information on keeping the system files and tables synchronized.*

Review of Questions answered

1. What is The Solution Series?

2. What are the components of The Solution Series?

3. How is the system organized?

4. What programs, languages, and tools does the system use?

5. What security options are available?

6. What customization options are available?

7. What reporting options are available?

8. How is the system maintained and upgraded?

CHAPTER 3

Data Structures and Processing Modes

In This Chapter

Introduction

This section explains the physical and logical structures of The Solution Series files for both the indexed and relational versions.

Tasks

This section provides detailed directions for the following tasks:

- Displaying System Control Repository records
- Displaying Employee Database records

Questions answered in this section

This section answers the following questions:

1. What are the major files used in the indexed version?
2. What are the physical structures of those files?
3. What is the purpose of those files?
4. What record types do those files contain?
5. How do I display the contents of the System Control Repository?
6. How do I display the contents of the Employee Database?
7. How is the relational version organized?
8. What processing modes are used with the system?
9. What required and optional files are used in online mode?
10. What required and optional files are used in background mode?

The indexed version

This section explains the physical and logical structures used in the indexed version of The Solution Series.

The Solution Series Database consists of two files: the System Control Repository and the Employee Database. Most processing involves the use of these files.

System Control Repository

The System Control Repository serves as the Control File for The Solution Series. In execution scripts, it is named FILE01. It specifies how you will process human resource and payroll data.

Contents

The System Control Repository (Control File; FILE01) contains the following data:

- All application programs (source and object code)
- Field Name Table and Field Table Menu records (data dictionary)
- Programmer annotations
- Options lists
- Application tables
- Other system information

Organization

The System Control Repository uses an indexed sequential organization. Records are 80 bytes, fixed length.

The physical record key is 24 bytes. It consists of a 1–3 position record type code and 21–23 additional characters of key information.

☞ *Refer to* **Record Key Structures** *(on page 439) for a complete list of the System Control Repository (Control File; FILE01) key record structures.*

Object Codes

The System Control Repository contains several record types.

Some records have subsidiary record types. Each record type can be identified by a unique Object Code.

For example, some of the Object Codes for the 'C' records are as follows:

Object Code(s)	
Object	Object description
C	Option lists
C/D	Option list description
C/V	Option list values

They are required for several of The Solution Series programs to select specific System Control Repository records for processing. Programs that require an Object Code are DISPLY, COPY, EDIT, PURGE and EXPORT.

☞ *Refer to* **Object Codes** *(on page 429) for a complete list of the System Control Repository Object Codes.*

System Control Repository utilities

The Solution Series provides a variety of utilities for displaying and maintaining System Control Repository records.

☞ *Refer* **Customization** *(on page 107) for information on the System Control Repository utilities.*

Employee Database

The Employee Database serves as the Master File for The Solution Series. In execution scripts, it is named FILE02.

Contents

The Employee Database (Master File; FILE02) contains the following data:

- Report generators
- Company data
- Tax data
- Employee data
- Copies of object code from the System Control Repository
- Audit records
- 'Other' records (Pointer 39)

Some object code is copied from the System Control Repository to improve program response time.

Organization

The Employee Database uses an indexed sequential organization.

Records are variable length, with a maximum length of 3060 bytes. The record key is 32 bytes, which follows a 3-byte record length.

Record types

The Employee Database contains several record types. Some records have subsidiary record types.

☞ *Refer to* **Record Key Structures** *(on page 439) for a complete list of the Employee Database key record structures.*

Record segments

Company (record type D), employee (record type M), and tax (record type H) records are divided into logical subdivisions called segments. Each segment contains a particular type of information. They are sequentially ordered within a master record.

Types of segments

There are two types of segments:

- Single-occurrence—only one occurrence of the data exists for a particular master record. For example, company name and address will occur only once.

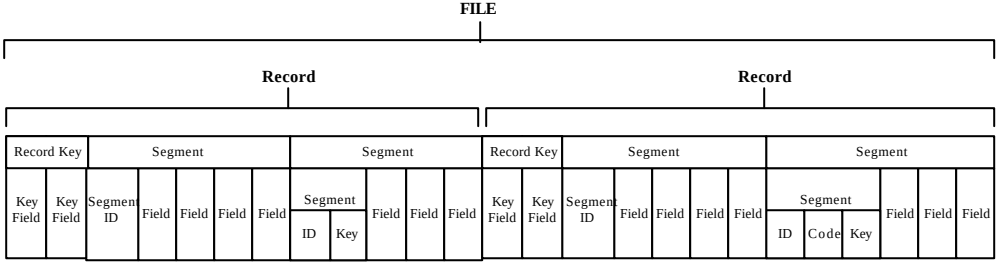
- Multiple-occurrence (stacked)—multiple occurrences of the segment type can exist for a particular master record. For example, there can be multiple occurrences for employee earnings and deductions segments.

How segments are identified

Each segment is identified by a unique one-character code called a Segment ID. For example, the Segment ID F identifies an employee's name and address segment.

Some multiple-occurrence segments (C, E, and L) are further divided by Segment Codes. For example, Segment Code EEA represents history hours, rate, and so forth, from the last payment.

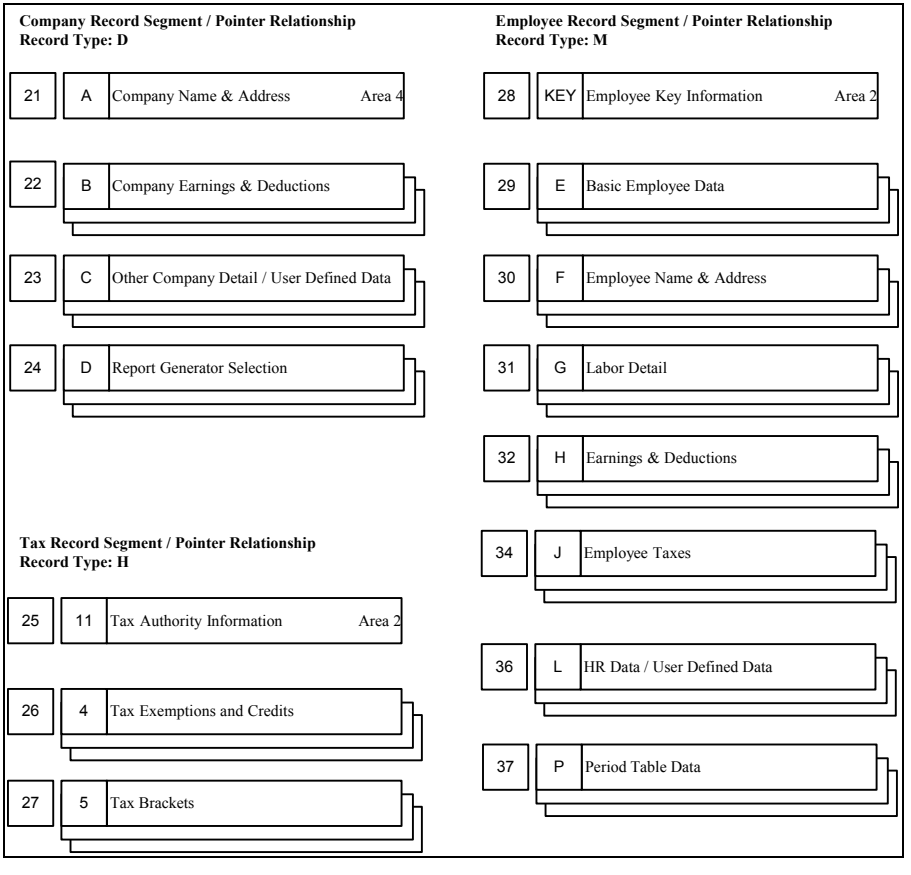
A Segment Key is further information that identifies a particular segment occurrence. The Segment ID (and possibly Segment Code) is always part of the segment key.



How segments are located by programs

Segments are located by a pointer. The Employee Name and Address Segment (Segment F) is located by addressing Pointer 30.

☞ *Refer to the section* **Working Storage** *(on page 50) for more information on addressing data.*



☞ *Refer to* **Record Key Structures** *(on page 439) for a complete list of the Employee Database key record structures.*

Working storage

Working storage resides in the CBSV COBOL programs. There are four main areas of working storage, as shown in the following figure—AREA1, AREA2, AREA3, and AREA4 are accessible to English Language (Cyborg Scripting Language) programs:

AREA1	AREA2
Pointer Table Time Entries Screen (data to terminal/monitor) I/O buffer 'Other' records	Work (data from terminal/monitor) Tax Master Record Employee Master Record
AREA3	AREA4
Cyborg Scripting Language Object Code Report Extract	Company Master Record

Each of the four main areas is subdivided into a number of work spaces. These work spaces are called 'pointer spaces' or simply 'pointers.'

Data addresses

Pointers are a way to address data. The system uses pointers as an indexing technique to address every data element in working storage.

Each subdivision of working storage (each pointer space) can be viewed as a two-dimensional table. Each entry, or 'occurrence', in a table has a length defined by the Pointer Table that contains the address of each pointer.

To determine the location of a field in working storage, the system manipulates the Pointer Table by adding together the field's displacement, as specified in the data dictionary, and the value of the pointer's address. The system uses the result as a displacement within the specific area in which the field resides.

When writing Cyborg Scripting Language programs, the address of the pointer must be manipulated to point to the proper occurrence of the data.

Segment/Pointer relationship

Employee Database records (company, tax, and employee) can contain many different types of data, divided into several segments. For example, the table below displays the different kind of data in a master record for an employee.

Each segment has one pointer used to address the location of the data within working storage:

Record	Pointer	Segment	Description
EMPLOYEE	28	Key	Employee Key information
	29	E	Basic employee data
	30	F	Employee name and address
	31	G	Labor detail
	32	H	Earnings and Deductions (HEDs)
	34	J	Employee taxes
	36	L	Human Resources data/user-defined data
	37	P	Period Table data

Other files

This section introduces and explains other files used by The Solution Series utilities and processing programs:

File	Purpose
FILE03: Audit/Report/ Message Print File	Contains any error messages, audit trails, and/or reports for the process. FILE03's online equivalent is the CRT monitor that displays the results of processing a screen.
FILE04: Control Record File	Used during a background processing run to tell the system which program(s) to execute. The format of the control record resembles the Command Line of an online screen. FILE04's online equivalent is the keyboard, which allows you to enter data into the Command dialog box.
FILE05: Data Input File	A general purpose sequential input file. Commonly used to import data. For example, it is used with the Maintenance In (MAINTI) utility.
FILE06: Installation Control File	Used to build the System Control Repository.
FILE07: Installation Master File	Used to build the Employee Database.
FILE08: Replication Holding File	Used by the Distributed Administration to maintain a record of any changes made at a local distributed location (DL). Content may be used as source for updating another DL node with those changes made at the local DL node.

File	Purpose
FILE09: Installation Replication Holding File	Used to build the Replication Holding File (FILE08) at installation.
FILE10: Output File	A general purpose sequential output file.
FILE11 to FILE13	The Payroll Process's batch master file, referred to as the P20 file. These files are used by the Pay Extract (PAYXTR) process to prepare the random Employee Database data for the Payroll Process, by the Pay Merge (PAYMRG) process to update the Employee Database after the Payroll Process, and by some reports.
FILE14: Input File	Contains sorted extract data. It is used as input to the Print Phase of a report process.
FILE15: Output File	Contains extracted data. It is used in the Report Extract Phase to provide selected information for printing.
FILE17, FILE18, and FILE19: Alternate Print Files	Used during Report Processing as alternate output. These files must be customized.
FILE20/21: Replication Packet File	Used by the Distributed Solution as an update repository. Content will be used to update the distributed location (DL) node.
FILE23 to FILE29: User-defined Files	Supplemental files provided for your use in either online or background processing. To make use of these files, you will need to change their lengths in CBSV programs.
FILE31 Output File	Check print file from Pay Print (PAYPRT).

Note: File names FILE50 to FILE59 are reserved for use by Cyborg Systems Consulting Services.

FILE30 (Savings Bonds) and FILE32 (COBRA) are optional files, available only in the US.

Refer to **System Files** *(on page 459) for more detailed information about these files.*

Apply the Concepts

1. What are the logical subdivisions of records called?

2. Give an example of a stacked segment.

3. What are the components of a segment key?

4. What are pointers and what purpose do they serve?

The relational version

This section explains physical and logical structures of the relational version of The Solution Series. It also explains the relationship between the indexed and relational versions.

The relational and indexed versions of The Solution Series look identical to the end user.

System Control Repository

System Control Repository replication

All option lists, certain application tables, and position control records stored in the System Control Repository are replicated in relational tables. This data is then available for reporting by third-party tools. For example, you can include both an option list code and its value on a report.

The build process

During the installation of the system, the CASE tool, RDBPGM0, generates program RDBPGM1 and RDBPGMA through RDBPGMH. RDBPGM1 creates the relational tables to store the option lists and certain application tables from the System Control Repository.

The population process

During the installation of the system, the Build/Rebuild Control File Relational Tables utility, POPF01, will initialize the relational tables by copying the data from the System Control Repository into the associated relational tables.

Impact on processing

The Solution Series core programs (for example, CBSV) use the indexed version of the System Control Repository as input.

Synchronization of the System Control Repository and relational tables

Synchronization of the System Control Repository and its associated relational tables is handled automatically. However, should a synchronization problem occur, you use the Build/Rebuild Control File Relational Tables (POPF01) program to resynchronize the System Control Repository and its associated relational tables.

☞ *Refer to* **Synchronizing Relational Tables and Indexes** *(on page 337) for more details on this program.*

Employee Database

In the relational version of The Solution Series, company, tax, and employee data are stored in relational database tables. Each company and employee segment equates to a relational table. Stacked segments become multiple rows in a table.

The following table describes where the data from the Employee Database is physically located:

This component	Is stored
Organization Control Number and Employee Number	In the Employee Database.
Index (secondary key)	In a relational database table. Provides cross-reference tables where the actual data resides.
Employee and company data	In relational database tables.

☞ *Refer to* **Record Key Structures** *(on page 439) for information on the keys to the different record types.*

Impact on processing

The Solution Series core programs (for example, CBSV) use the Data Manipulation Language (DML) SQL statements embedded in COBOL programs generated by the CASE tool (RDBPGM0) to read from and write to the relational tables.

Database recovery and index rebuilds

In general, indexes are fixed automatically. However, should you need to rebuild the database indexes for the Employee Database, two programs—INDEXS AND FIXIDX—are provided to do so.

☞ *Refer to* **Synchronizing Relational Tables and Indexes** *(on page 337) for more details on these programs.*

The CASE tool

The CASE tool, RDBPGM0, is a Cyborg-delivered COBOL program that generates the data definition language (DDL) to define the relational database and tables (with associated indexes and views) from The Solution Series data dictionary. In addition, it generates the data manipulation language (DML) to process the data within these tables. All generated DDL and DML use embedded, static SQL.

When to use the CASE tool

After the installation, you will use the CASE tool after you:

- Complete modifications to existing data definitions
- Alter a delivered table, create a new table, or drop a table
- Convert generated dynamic SQL to static SQL

Because the precompiling and compiling of the DDL and DML are done on the database server, all SQL is *native* to your particular RDBMS.

☞ *Refer to* **Customization** *(on page 107) for details on using the CASE tool.*

The data dictionary and DDL/DML

The Solution Series data dictionary, the Field Name Table (F records) and Field Table Menu (RFM records), serves as the basis for the generation of all DDL and DML.

The data dictionary contains information about each field used in the system.

All option lists, and certain application tables from the System Control Repository are replicated into relational tables.

All Employee Database record segments are stored in relational tables.

The DML subroutines and CBSV

Once the relational tables have been built using the generated DDL statements, the generated DML statements are used in application processing.

Note: *The Solution Series CBSV programs execute I/O requests on behalf of the Cyborg Scripting Language application programs. When an application makes a request for data, CBSV makes a call to the appropriate DML subroutines.*

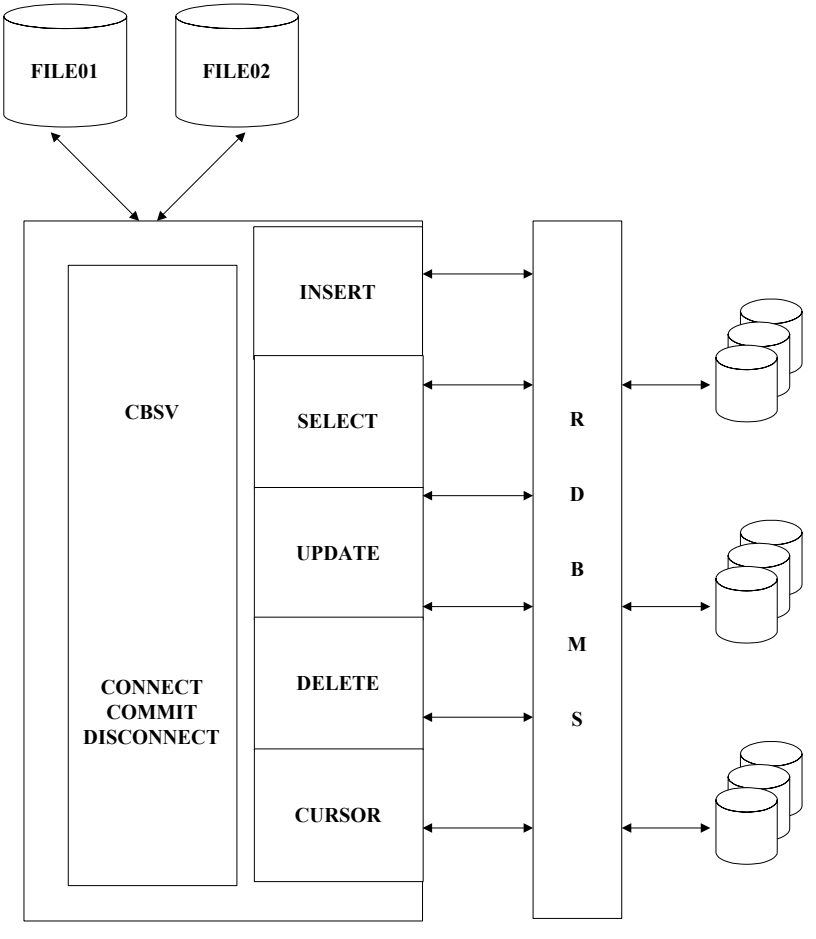
The following scenario illustrates the connection between the DML subroutines and CBSV:

1. The application makes a request to CBSV.
2. CBSV calls the applicable DML subroutine.
3. The DML subroutine makes a request to the RDBMS to execute the SQL to satisfy the request.
4. The RDBMS passes the return code and data (if applicable) back to the DML subroutine.
5. The DML subroutine passes the return code and data (if applicable) to CBSV.
6. CBSV passes the return code and data (if applicable) back to the application.

Other CBSV tasks

In addition to handling the DML calls, CBSV also handles the following tasks, as required by the RDBMS:

- CONNECT
- COMMIT
- DISCONNECT



The Cyborg database

The physical database will be created during the installation of the system by the CASE tool, RDBPGM0.

The database tables

The CASE tool (RDBPGM0) reads the data dictionary (F and RFM) records created during the EXPORT from the System Control Repository to create relational tables, as follows:

Source	Relational tables
FILE01	All option lists, and certain application tables
FILE02	All pointers to company and employee data

☞ *Refer to* **Relational Tables and Views** *(on page 403) for a complete list of the delivered relational tables.*

☞ *Refer to the Data Model documentation for detailed information on the layout and content of each of the delivered relational tables.*

The database indexes

RDBPGM1 automatically creates a primary index for each table that it generates to ensure referential integrity through a unique primary index.

The generated index consists of the fully concatenated key of each row. For example, the index for the EMPLOYMT_ACTIVITY table consists of the Organization Control Number, Employee Number, Activity Date, and Activity Code.

The database views

RDBPGM1 automatically creates a view of each table that it generates. The generated views contain every column on the table. These delivered views are used internally by the CBSV programs.

The delivered views are named as follows:

record/data type + segment type + segment code + _VIEW

For example, the view name for table Company Pay Frequencies is DCAJ_VIEW. You can create additional views using SQL.

☞ *Refer to* **Relational Tables and Views** *(on page 403) for a complete list of the view names.*

Naming conventions

Any table names or fields you add to the database are limited to 18 characters.

☞ *Refer to* **Naming Convention** *(see "Naming Conventions" on page 465)s for more information.*

Apply the Concepts

5. Define DDL and DML.

6. What is 'referential integrity' in relation to indexes?

7. What is a database 'view'?

8. Why should you use the Cyborg naming convention when you modify or create tables, fields, and/or programs?

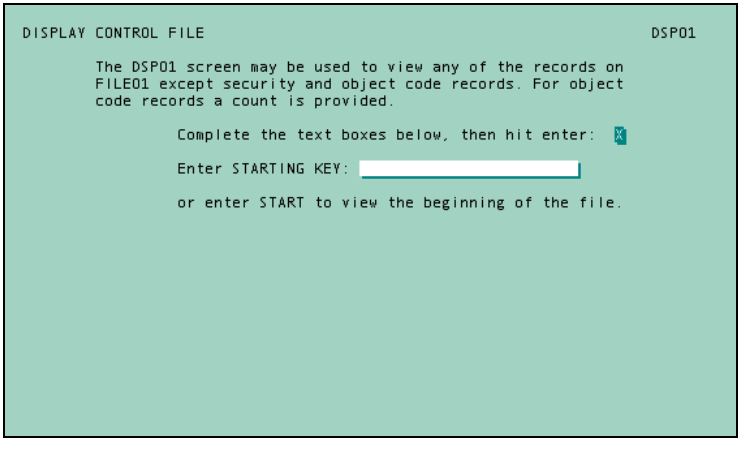
Record display utilities

There are two online utilities that you can use to display the first 75 positions of the records within The Solution Series:

- Display Control File form (DSP01)—displays System Control Repository records
- Display Application File form (DSP02)—displays Employee Database records

These two utilities work the same.

Below is the Display Control File form:



With either utility, you can enter 'START' in the Enter Starting Key text box to display all records or you can enter a starting key value to begin the display at specific record.

Processing modes

The Solution Series operates in two processing modes—online and background. This section discusses the processing programs used for these modes, along with the required files used during processing.

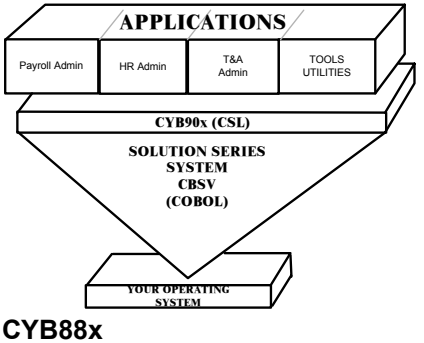
Root programs

The Solution Series contains three 'root' programs—programs that set, start, and support the system. These programs are not directly executable; instead, they execute automatically as the system requires.

- CYB90x
- CYB88x
- CYB89x

CYB90x

The Cyborg Scripting Language program CYB90x acts as the operating system for The Solution Series. CYB90x reads the command (or control record) and turns control over to the requested CSL application or utility program. When the CSL program is finished, control is passed back to the CYB90x program.



CYB88x

CYB88x is a Cyborg Scripting Language program that performs the following tasks:

- Manages session number information.
- Restores portions of working storage.
- Assigns the default Organization Control Number (Control 1-2) displayed when the user signs on to the system.
- Sets the maximum number of lines on a report page.
- Sets the Production Version switch to on or off.

CYB89x

CYB89x is a Cyborg Scripting Language program that loads pointer definitions into working storage.

When you sign on to the system, CYB89x attempts to locate the pointer table on the Employee Database.

If the pointer table is not found, CYB89x copies it from the System Control Repository into a single table on the Employee Database.

Subsequent processing is then more efficient because less input/output processing is required to read one table.

Online processing

Online processing is the procedure of entering, viewing, or manipulating data through an interactive session of The Solution Series.

In an online session, verification is performed immediately. Error messages are displayed to indicate what corrective action should be taken.

If verification is successful or errors have been corrected, data is updated to the System Control Repository or Employee Database immediately.

Online programs

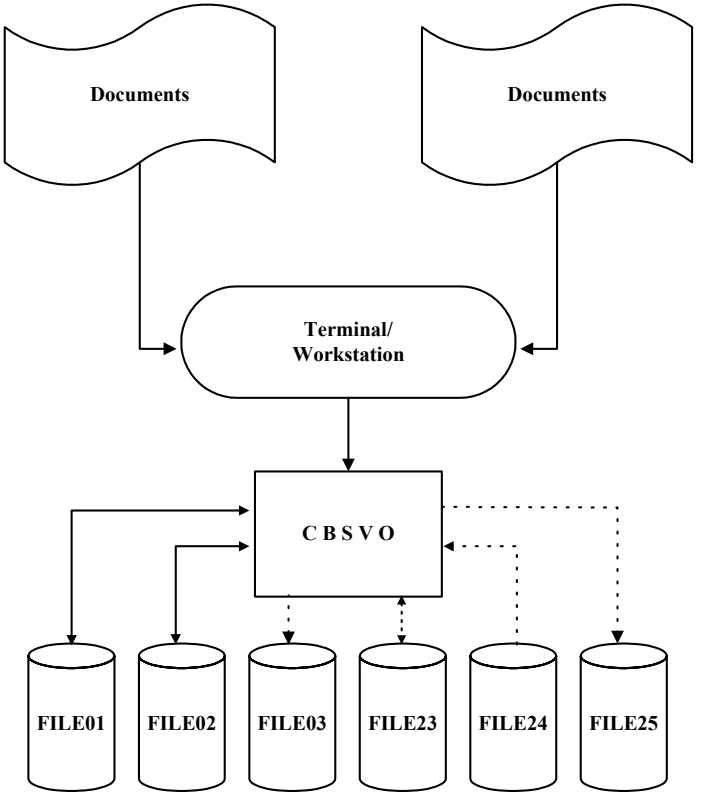
To run The Solution Series online, you execute one of the following programs:

Program	Description
CBSVO	Online program
CBSVOT	Online trace program

File requirements

The following table and figure show the required and optional files used during an online session, and how they are used:

File	Required/Optional
System Control Repository (Control File; FILE01)	Required
Employee Database (Master File; FILE02)	Required
Audit/Report/Message Print File (FILE03)	Optional for trace program (not used otherwise)
User-defined Files (FILE23, FILE24, FILE25)	Optional



Background processing

Background processing is the procedure of grouping a number or series of tasks to be accomplished in a background mode.

Background programs

To run The Solution Series in batch, you execute one of the following programs:

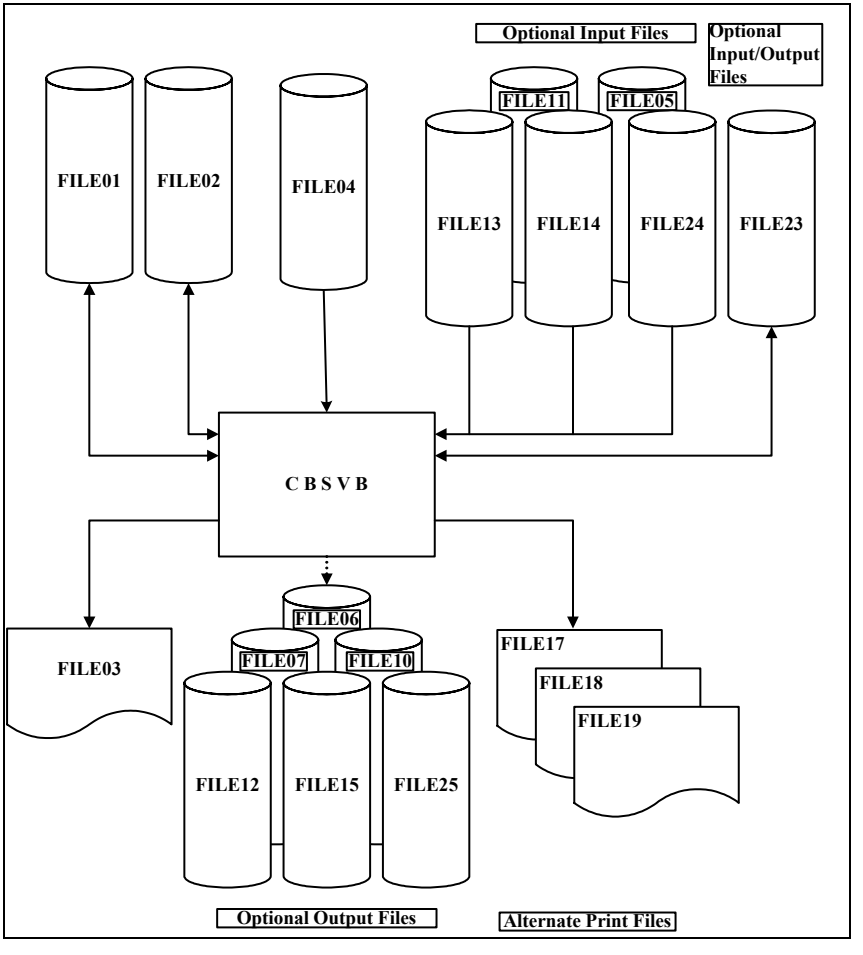
Program	Description
CBSVB	Batch program
CBSVBT	Batch trace program

File requirements

The following table and figure show the required and optional files used during a background run and how they are used:

File	Required/Optional
System Control Repository (Control File; FILE01)	Required

File	Required/Optional
Employee Database (Master File; FILE02)	Required
Audit/Report/Message Print File (FILE03)	Required
Run Parameters (FILE04)	Required
Input Files (FILE05, FILE11, FILE13, FILE14, FILE24)	Optional
Replication Holding File (FILE08)	Optional
Input/Output File (FILE23)	Optional
Output Files (FILE06, FILE07, FILE10, FILE12, FILE15, FILE25)	Optional
Alternate Print Files (FILE17, FILE18, FILE19)	Optional
Check Print File (FILE31)	Optional
Savings Bond and COBRA (FILE30, FILE32)	Optional (US only)



Run parameters

You enter parameters for a background process as a control record on the Control Record File (FILE04). The control record directs the processing of CBSV.

Multiple control records can be entered on the Control Record File (FILE04). Each record is executed sequentially based on its contents.

The format of the control record is as follows:

Position	Description
1–15	Comment area
16	Action field
17–22	Organization (Control) 1-2
23–28	Program or Form field

Position	Description
29–30	Code field, Code-1 and Code-2
31–40	Key field
41–55	Additional key field
75	Continuation character

For example, the following control records would be used to request a Batch Layout Report (BATCHL) for two forms:

```
         1         2         3         4         5         6
123456789012345678901234567890123456789012345678901234567890123456789
P BATCHLJ00100  999999BATCHL  HH-SCR
P BATCHLJ00100  999999BATCHL  GG-SCR
```

Additional controls

To set additional controls, use these characters:

Use	Enter	In position(s)
To continue a record to another line	*	75
To allow multiple screens of information to be written to FILE03	W	16

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Displaying System Control Repository records

To display records in the System Control Repository, follow these steps:

1. Access the DISPLAY CONTROL FILE (DSP01) form

Access this form by selecting:

Component: Development Tools
Process: System Control Repository Utilities
Task: List System Control Repository

2. Enter a key value

To begin the display at a specific record, type a key or partial key in the Enter STARTING KEY text box.

To view all records (except security and object code records), type 'START' in the Enter STARTING KEY text box.

3. Save the form

The requested records are displayed.

Press Enter to see subsequent records.

Displaying Employee Database records

To display records in the Employee Database records, follow these steps:

1. Access the DISPLAY APPLICATION FILE (DSP02) form

Access this form by selecting:

Component: Development Tools
Process: Employee Database Utilities
Task: List Employee Database Records

2. Enter a key value

Enter the beginning key of the record you wish to access.

For example, to access the first LMODEL for organization 999999, enter the first six positions of the organization identifier (in this case 999999), in the seventh position use 'M'

(record type for employee records), and in the last two positions enter 'LM' (starting characters for LMODEL).

To view all records (except security and object code records), type 'START' in the Enter STARTING KEY text box.

3. Save the form

The first 76 positions of the requested records are displayed.

Press Enter to see subsequent records.

Review of Questions Answered

1. What are the major files used in the indexed version?

2. What are the physical structures of those files?

3. What is the purpose of those files?

4. What record types do those files contain?

5. How do I display the contents of the System Control Repository?

6. How do I display the contents of the Employee Database?

7. How is the relational version organized?

8. What processing modes are used with the system?

9. What required and optional files are used in online mode?

10. What required and optional files are used in background mode?

PART 2

Getting Started

In This Section

CHAPTER 4

Setting Up Environments

In This Chapter

Introduction

This section addresses important topics related to preparing and setting up your environments for any application within The Solution Series.

There are a several reasons why you should understand the installation process. They include:

- Understanding what you have been left with when the installer leaves your site
- Using the installation test data for internal training and as a general demonstration environment for staff who need to practice new skills at training sessions
- Being able to repeat parts of the installation process when installing application updates

In this section, you will learn about pre- and post-installation issues, tasks, decisions, and how you should deal with them. Some of these topics are addressed in more detail in subsequent sections with related tasks for you to complete.

Tasks

You must complete the following tasks to prepare for and set up your environments:

- Prepare your site's hardware and software for The Solution Series installation
- Back up all installed files, saving the original environment
- Set up the security sign-ons and Security Officer's profile
- Modify the model execution scripts as needed

Questions answered in this section

This section answers the following questions:

1. What preparation is involved for this installation?
2. What are the installation hardware and software requirements?
3. Who does the installation?
4. What is installed?
5. How many environments need to be set up?
6. What are the configuration options?
7. How are error messages to be handled?
8. Are there any modifications that should be made immediately following the installation?
9. What are the post-installation security issues?

Pre-installation preparation

At your request, Cyborg's installer will install the software for your new Solution Series application(s).

As the system administrator, you, and possibly other members of the data processing team, must prepare for this installation. It is crucial that before the installation, you set up an account on your system for the installer to use.

Who should be present during the installation

You and any other data processing personnel who will be handling The Solution Series software should be present for the entire installation.

Minimum hardware and software requirements

Refer to your platform-specific installation guide or your Account Manager/Project Manager for specific software and system requirements.

What has been installed

When the installation is complete, the following types of files and data will be installed on your system:

- Payroll files
- Online/Background files
- GUI files
- Test data
- Job Control Language
- Relational database tables for System Control Repository and Employee Database (only installed if you have a relational database environment)
- The Solution Series Support System

The same files are used for all installations. The installation procedures change only if you are using a relational database.

☞ *Refer to* **System Files** *(on page 459) for a complete list of all The Solution Series files with attributes and uses.*

The payroll installation

To perform the system install for the payroll system, the installer brings along the following:

File/Program	Description
CYBMST	The Cyborg Library file that contains the main background payroll software. This file consists of COBOL programs, report generators, and system tables.
P9CNVT	The program used to extract information from the CYBMST file.
TAXFILE	The tax master file.

Once the background payroll installation is complete, the following will be present on your system:

- COBOL programs
  - P9CNVT
  - P2EDIT
  - P4CALC
  - P5PRNT
  - O4CALC
- Payroll source file (CYBMST; for payroll users only)
- Batch Master File (P20)

The online/background system installation

To perform the online system installation, the installer uses the following files/programs:

File/Program	Description
FILE05 (DEMO0105)	The sequential version of the online System Control Repository. It contains the data dictionary, Cyborg Scripting Language programs, menus, forms, and option lists.
CBSVB	A background-processing program used for creating the System Control Repository from FILE05 (DEMO0105), and for maintaining the System Control Repository and the Employee Database.
CBSV	Cyborg library for CBSVx background and online source code.

Once the online installation is complete, the following will be present on your system:

- System Control Repository
- Employee Database
- CBSVO/T
- CBSVB/T
- Subroutine (CBSVRFT; non-relational only)

The System Control Repository contains option lists, a data dictionary, the Cyborg Scripting Language source, and table records.

The Employee Database contains all of the data that relates to your company and employee records, plus statutory rates and limits. A standard set of test data is loaded at installation time that you can modify. For relational database management systems, the Employee Database contains information concerning the primary keys of the rows in the various relational tables.

The GUI installation

To perform the GUI installation, the installer brings along the client installation CD-ROM for The Solution Series.

Once the GUI installation is complete, the following will be present on your system:

- Client Data File
- GUI executable
- Form creator (versions 4.5 and 4.0 FormBuilder, version 3 ScreenMaker)
- Help files
- Adobe Acrobat online documentation files
- Configuration file

Following the installation, the installer sets up one or two of the PC workstations. It is your responsibility to set up the remaining workstations. Typically, your network manager decides where the Hypertext files should reside, depending upon network traffic and client workstation file space.

The relational database installation

To perform the relational database install, the installer brings all of the files/programs required for the non-relational version of the system, and the following:

Program	Description
RDBPGM	Cyborg Library for the RDBPGM0, RDBPGM2, RDBPGM3, and RDBPGM4 CASE tool programs. Use the Cyborg-delivered job JPUL_RDB to extract these programs.
RDBPGM0	CASE Tool program that generates the RDBPGM1 and RDBPGMA through RDBPGMH programs. It uses the F and RFM records on the System Control Repository to generate the data definition language (DDL) to define the Cyborg-delivered relational database tables and the data manipulation language (DML) to process data within these tables, using static SQL.
RDBPGM2	Determines what synchronization problems exist between the database tables and the Employee Database.
RDBPGM3	Reports the number of entries per segment/table for a profile.
RDBPGM4	Corrects invalid data (date and decimal) on a P20 file.

General installation notes

In general, all installations will create software that falls into one of the following categories:

- Program Source Code
- Program Object Code
- Job Control
- Data Files

During the installation, a series of libraries or directories are created to reflect these categories using Cyborg's naming standards for field, program, option list, and Cyborg Scripting Language verb names, module codes, table codes, alternate keys, employee segment codes, company segment codes, error message numbers, file numbers, and miscellaneous other records. These global naming standards apply to all current and future releases.

☞ *Refer to* **Customization** *(on page 107) for more information on global naming standards.*

Delivered test data

To perform tests on the installation, the installer brings along special test data.

There are several test companies delivered with the installation. As an example, the following table lists the test companies delivered in the US and Canada and their potential uses:

Organization Control Number	Organization Name	Type of Organization	Comments
999999	ACME Manufacturing	General	A US test company populated with employees, and used by the installer to test the system.
996666	ACME Hospitals	Hospital Position Management	Sample Position Administration data.
995555	Midwest Manufacturing	Retiree	Sample retiree data.
993333	Midwest Manufacturing	Applicant	Sample applicant tracking data.

The organization below is delivered and maintained by Cyborg. Customers use it exclusively for their considered hours and earnings.

Organization Control Number	Organization Name	Type of Organization	Comments
991111	ACME Manufacturing	Considered Hours/ Earnings	Considered hours/earnings data.

Job Control Language

Platform specific job control language is also delivered with The Solution Series.

File/Program	Description
Job Control	The installation notes and execution scripts, such as Job Control Language (JCL). These are execution scripts, command procedures, and command language programs used to install and maintain the background and online systems.

Testing the installation

Once the installation of the online, background, and the GUI is complete, you and the installer will run standard processes to test the installation. Testing the installation is very important for two reasons—it assures you that the installation was successful, and it creates data in the online and background files for the test companies' Organization Control Numbers (Control 1-2s).

The test data

The test files contain data for the delivered organizations. The test data is held in the System Control Repository and is accessed using CBSVB.

Running tests

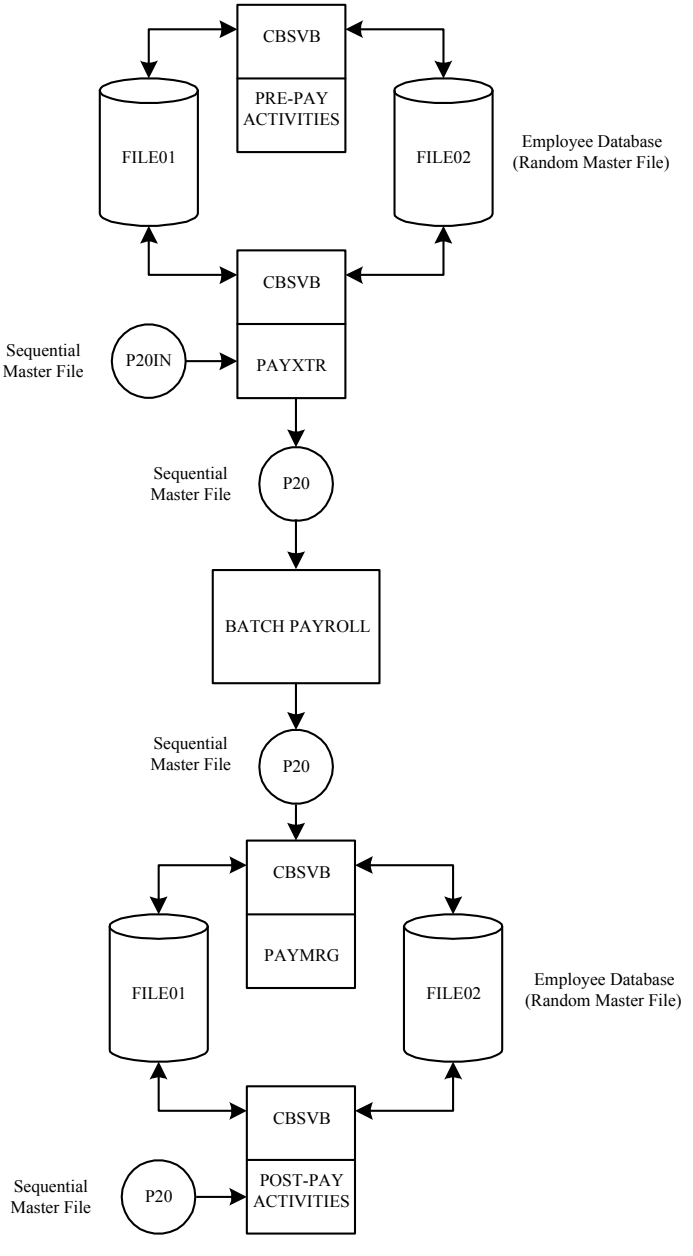
The test data is extracted from the Employee Database or the database. If you are a payroll user, a complete payrun is processed. A standard set of reports is also produced.

The payroll cycle

An integral part of the testing process is the payroll cycle. The payroll cycle is the process of producing pay using CBSV programs together with the payroll process COBOL and report generator programs.

The payroll cycle includes the following stages:

- Stage 1—Preparing for the payroll process
- Stage 2—Extracting payroll data for the payroll process
- Stage 3—Producing the audit trail reports
- Stage 4—Executing the payroll process and performing a maintenance run
- Stage 5—Merging the payroll process calculations into the online system



The programs used in the payroll cycle are as follows:

Program	Description
Pay Extract (PAYXTR)	A program run with CBSVB that extracts a copy of the online application data from the Employee Database. This extract creates a new copy of the sequential master file, P20.
P2EDIT	The transaction editor program. This is the first program executed as part of the background payroll process. This program performs edits on the input transactions.
P4CALC	The calculation program. This program performs the payroll calculations and updates to the sequential master file (P20) during a payroll run. It also extracts report information for P5PRNT.
P5PRNT	The report print program. This program formats and creates all output, including payments, reports, tapes, and records that must be recycled to future payroll runs.
Pay Merge (PAYMRG)	A program run with CBSVB that recreates the Employee Database using a P20 as input.

To execute these programs, the installer will run the following jobs:

- JPAYXTR
- JPAYRUN
- JMNTRUN
- JPAYMRG

☞ *Refer to the Payroll Organization Setup and the Payroll Employee Setup guides for more information about the payroll cycle.*

Graphical User Interface (GUI) informational and error messages

The following are examples of some informational and error messages you may receive related to the GUI. Where needed, a brief explanation of how to resolve them is included.

Status: Warning	Explanation
An error occurred during the process of copying or decompressing files.	
An error occurred previously for the specified file set.	
Compress function was unable to create output file in the target directory.	Check to make sure there is enough space available to copy the files and verify that security is not preventing your access to the directory.

Status: Warning	Explanation
Rebuild ZXCYB88T in progress, try again.	This message appears if the rebuild of the ZXCYB88T records is in process or the process did not complete normally. Run the RST88T Cyborg Scripting Language program in batch to clear the lockout.
Target directory is read-only and the files cannot be copied.	
The function was unable to allocate more memory needed to complete the file decompression process.	More memory is required to complete the installation.
The library file is incompatible with the InstallShield compressed library file format.	Some other unspecified error was encountered.
The Options specified were invalid.	Some other unspecified error was encountered.
The target drive is out of disk space and the process cannot continue.	Remove unnecessary files to make room for the application and try to install the product again.
This product cannot be installed on the floppy drive. Please select another directory.	
Unable to create directory. Please enter a valid path.	
Your Client Data File does not contain the field details that Form Builder needs because of your Profile settings. Have your Security Officer check the 'Build field for Form Builder user' option for your profile. Then refresh your Client Data File.	The Security Officer has the option to include or exclude these records during the build of FILECL.

Database error and informational messages

The following error and informational messages may be encountered while processing The Solution Series utilizing any relational database system:

Message	Explanation
Invalid Table Name	Create appropriate segment name and field name records using the EDIT program, then rebuild the database.

Message	Explanation
Key Overflow	The system allows 11250 bytes to store key information. This limit has been exceeded. Increase size and limit checks of the subscripts utilized.
Update Table Overflow	The system allows 750 segments on any individual record. This limit has been exceeded. Increase update table area and limit checks of subscripts utilized.
User Table Overflow	The system allows 99 user-defined segments during index recreation process. More than 99 user tables are present. Increase user table area.
Connect Failed With SQLCode - xxx	For those databases that require a connection; unable to connect to database. Review database manual for meaning of this message and take appropriate action.
Use Failed With SQLCode - xxx	The USE command failed. Review your database manual and take appropriate action.
Initial Select Failed With SQLCode - xxx	For databases that do not require a connection—indicates status of database access. Review your database manual and take appropriate action.
Index Error Corrected on Table	SELECT statement failure. No user action required.
Record Not Found on Table	SELECT statement failure. No user action required.

Following all installations

The Cyborg installer will give you some general instructions, such as:

- a description of the installation process so that subsequent installations can be performed
- job control and execution scripts that have been set up on your computer to run The Solution Series

Post-installation issues

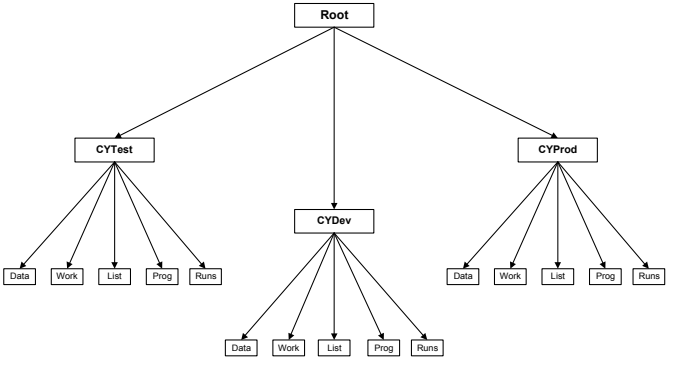
You will need to address the following issues soon after the installation is completed:

- Possible environments
- System-wide defaults
- Configuration options
- Security sign-ons and the Security Officer Profile
- Backups
- Change control procedures
- Modification of execution scripts

Possible environments

Cyborg recommends that you set the following environments:

- Development
- Test
- Production



If you have an indexed sequential production system, you may only require two environments. If you operate The Solution Series on a relational database environment, we encourage you to set up an RDB test environment, in addition to the indexed sequential test environment. This is because, once installation has been completed, RDB users must perform additional steps to create their database and populate tables.

We encourage you to set up additional environments if needed (for instance, set up a migration environment on which to perform your customization upgrades, in addition to the test system).

The Solution Series software components take advantage of a wide variety of host platforms, workstations, and communications protocols. The access configuration of each workstation on a network accessing a host system can be customized based on the environment's particular needs.

Within these environments, you can set up a variety of ways to access the environment. You can also have multiple access in the same environment.

System-wide defaults

As you prepare to set up your environment(s), you should consider the system-wide default options that you may need to establish. The System Options (SCOPTS) form is used to help you establish system-wide default options, such as user code valid time-span, production version setting, and an alternate language (German or Spanish, and so forth). Access to the System Options form is only for your Security Officer.

☞ *Refer to* **Security Considerations** *(on page 97) for more information about the System Options form and setting up these options.*

Configuration options

For The Solution Series application(s) to operate, the programs need to know the location(s) of these installed files:

- System Control Repository
- Employee Database

Security sign-ons and the Security Officer Profile

Special attention should be given to the creation of the security records. It is very important that you establish your security as soon as possible after the installation has been completed. Security violations are logged on the system and should be viewed regularly by your Security Officer.

You need to set up the security sign-ons and change the default Security Officer's profile for your environments. You need to consider who will need access to The Solution Series, what information they will require access to, and at what organizational level.

☞ *Refer to* **Security Considerations** *(on page 97) for additional security information.*

The importance of backing up your data

Immediately following the installation of The Solution Series, you should backup all installed files, saving the original environment. You must retain this backup for future reference, along with the media that the installer brought for the installation.

You can use the Cyborg Backup utility (BACKEM) and then run a Pay Extract (PAYXTR) to produce a P20 file.

☞ *Refer to* **Using the Backup and Restore Utilities** *(on page 259) for information on backing up the system.*

The importance of recording your Cyborg system changes

Record keeping or logging all the changes, fixes, and enhancements to your original Cyborg source code on a regular basis is very important. This record keeping can be done in the change files (called override files) or in a logbook. Either way, by keeping these records using a consistent method, you create an audit trail that can then be reconstructed and applied during catastrophic recovery, or when you receive fixes or upgrades to the software.

☞ *Refer to* **Identifying Problems and Applying Temporary Fixes** *(on page 205) for information on override files and applying Cyborg-supplied temporary fixes.*

Modification of model execution scripts

When your Solution Series was installed, the Cyborg installer used execution scripts to guide the installation for your environments. These execution scripts are delivered with your Cyborg system and are available to you at all times. These are model execution scripts and must be modified to run at your site.

Most importantly, you will need these execution scripts to further modify the files for re-installation or for maintenance of the software. You will also need these execution scripts to execute special utilities and programs for your Cyborg system.

Detailed Directions

Tasks

Determining what synchronization errors exist

The program RDBPGM2 compares the Employee Database (Master File; FILE02) and the indexed tables to the relational data tables to identify any synchronization problems. Execute the following:

INPUT	FILE01 FILE02	System Control Repository (Control File) Employee Database (Master File)
OUTPUT	FILE03	Audit/Message File
EXECUTE	RDBPGM2	

Note: When compiling RDBPGM2, you must link to the subroutines RDBPGMG, RDBPGMH, and RDBPGMB.

Estimating table space sizing

The program RDBPGM3 gathers information to be used in sizing a relational database. Execute the following:

INPUT	FILEIN1	current P20 file
OUTPUT	FILEOT1	80 character output file
EXECUTE	RDBPGM3	

Note: When compiling RDBPGM3, you must link to the subroutine RDBPGMH.

Correcting invalid data

The program RDBPGM4 verifies data types of the P20IN file to be loaded into the relational database. Execute the following:

INPUT	FILEIN1	current P20 file
OUTPUT	FILEOT1	new P20 file
EXECUTE	RDBPGM4	

Note: When compiling RDBPGM4, you must link to the subroutine RDBPGMH.

Review of Questions answered

1. What preparation is involved for this installation?

2. What are the installation hardware and software requirements?

3. Who does the installation?

4. What is installed?

5. How many environments need to be set up?

6. What are the configuration options?

7. How are error messages to be handled?

8. Are there any modifications that should be made immediately following the installation?

9. What are the post-installation security issues?

CHAPTER 5

Security Considerations

In This Chapter

Introduction

This section addresses important topics related to security considerations for The Solution Series applications in your environments.

Security is a high priority and very important part of system management. Cyborg's Solution Series security features provide capabilities to control your company's system security at multiple levels, ensuring only authorized access to sensitive information online or in batch processed jobs.

The Solution Series security features are based on the premise that one individual employee, the Security Officer, has full responsibility for establishing, controlling, and monitoring all levels of security and access.

Any attempted breach of security is immediately logged in the Security Violation Log that is available only to the Security Officer.

A security hierarchy must be defined by the Security Officer. This consists of determining which forms and data will be accessible to whom and which employees will be given update versus inquiry-only access or privileges to the system. These concepts are addressed in the information that follows.

Questions answered in this section

This section answers the following questions:

1. How can security be applied to special areas in The Solution Series system?
2. How many levels of security should be set up?
3. What are the responsibilities of the Security Officer?

The Solution Series security features and setup

The security features discussed in the information that follows focuses on areas and types of The Solution Series system security.

Areas of security

The Solution Series provides you with capabilities for applying security to data in these areas:

- **System entry**—An assigned, valid password and user code are required for entry.
- **Access mode**—You can assign a password that has update and inquiry-only capabilities or restrict it to inquiry-only.
- **Control 1-2**—You can allow users access to all, one, or selected organizations (Control 1-2s) on your Employee Database.
- **Tax Records**—Only authorized users can access records used for tax calculation in Payroll Administration.
- **Employee Records**—You can allow or limit access to all or specific groups of employee records.
- **Forms and programs**—You can allow or limit access to all or specific groups of forms and programs.
- **Fields**—You can restrict users from updating and/or viewing specified fields on the Field Name Table. Doing so also restricts them from RELOADing a form containing a restricted field.
- **Alternate Keys**—You can allow or limit access to all or specific Alternate Keys when processing a QUERY.
- **Delete This Entry**—You can prohibit the use of Delete This Entry—a function used for deleting a segment occurrence.
- **Objects and utilities**—You can restrict access to selected objects used with the COPY, DISPLY, EDIT, EXPORT, and PURGE utilities.

Refer to the Security Manual for additional information about establishing user-defined security.

Security setup

There are three levels of security access—complete, inquiry only, and none.

These levels apply to the company and employee information.

The Security Officer can control access to forms and programs in a very similar way. Access to forms and programs can be set for inquiry-only or no access at all.

To fine-tune this security, the Security Officer can control access to the actual fields that appear on the forms. This access can be set to full access for all the fields, no access to any field, or inquiry-only access to specified fields. Form, program, and field access relate to each other.

For example, if the Security Officer gives a user inquiry-only access to a form, the user can see the fields but cannot change them. If the user is given full access to a form, the user can see the fields and change them.

The Solution Series system has over 5,000 fields. If you think you want to fine-tune the security on a form by form basis, you should consider the on-going maintenance involved for the Security Officer with the security hierarchy.

Third Party Reporting Security Considerations

Currently, third-party reporting tools offer their own layers of security, which must be configured in addition to the security features offered by The Solution Series.

☞ *Refer to the Administering Reporting Administration guide for additional information on third party reporting security considerations.*

eCyborg Interactive Workforce Security Considerations

Because the eCyborg Interactive Workforce provides another means of accessing employee and company data within The Solution Series, it is necessary to secure this access in addition to regular Solution Series security.

☞ *Refer to the Security Manual for detailed information about eCyborg Interactive Workforce security.*

The Security Officer Profile

Security is established and maintained by an appointed employee, referred to as the Security Officer, in your company, .

The Security Officer is the person responsible for maintaining the security hierarchy.

The Security Officer's special operator ID permits unlimited access to the system, including all security features.

A Security Officer Password, User Code, and Operator ID are system-delivered by Cyborg under separate cover.

The Security Officer's user code never expires.

The Security Officer's password and user code can be changed, but the original operator ID must be kept on the Security File. If it is not, access to the Security File will be denied and replacement of records or establishment of new records will not be possible.

The Security Officer Profile program

The Security Officer Profile program provides an inquiry-only display of all operator IDs, passwords, and security authorization values. Only the Security Officer can view all the records or request the display of a selected security authorization code or an operator ID.

Cyborg recommendation

Cyborg highly recommends that you appoint a backup Security Officer who will work along with the appointed Security Officer, in the event of the primary Security Officer's absence.

You should contact your Cyborg account manager for details about registering your appointed Security Officer and backup with Cyborg, however this may be done when your contract with Cyborg is established.

As soon as you have designated your Security Officer and backup person, you should give that information to Cyborg.

You should encourage your Security Officer and backup person to communicate often, so there is no gap in the security responsibility with your system.

If they need assistance from Cyborg, phone support will be given as long as you have supplied Cyborg with proper identification for their Security Officer and backup position.

There is no online Help for Security tasks.

Review of Questions Answered

1. How can security be applied to special areas in The Solution Series system?

2. How many levels of security should be set up?

3. What are the responsibilities of the Security Officer?

PART 3

Implementation

In This Section

CHAPTER 6

Customization

In This Chapter

Introduction

This section addresses important topics related to customizing The Solution Series.

Customization of The Solution Series is the first phase of the implementation process, followed by data conversion and load, and migration to production. As the system administrator, you play a key role in the customization of your Solution Series system.

Implementation planning considerations

Your Cyborg Installation and Implementation Project Plan will help you manage the installation and implementation of The Solution Series. This plan outlines the steps you need to consider and need to perform to install the system and bring it to production. It also gives the approximate times for completing the tasks.

All components in The Solution Series use a common architecture, allowing the Payroll, Human Resource Administration, and Time and Attendance applications to interact in a number of ways. You should discuss with your Cyborg account manager the components you intend to implement and when, so these interactions can be taken into account at the beginning of the project.

There are several topics that you should be aware of to perform a successful implementation of The Solution Series. These topics include:

- What you must do to prepare for the system installation
- The minimum hardware and software required
- Concepts and terms with which you should become familiar
- Preliminary activities you will have to complete in preparation for implementation

Preparation for The Solution Series system installation and minimum hardware and software requirements are discussed in detail in the *System Overview* (on page 13) and *Setting Up your Environments* (see "Setting Up Environments" on page 75) sections.

Tasks

The tasks you will complete to customize The Solution Series system will vary by site. This section will help you identify which tools and utilities you need to accomplish a task.

This section provides detailed directions for the following tasks:

- Use of the Customization utilities
- Rebuilding the relational database
- Adding user application tables to the System Control Repository and the relational database

Questions answered in this section

This section answers the following questions:

1. What customization options are allowed by The Solution Series system?
2. What utilities does Cyborg provide to assist with the customization?
3. What standard naming conventions need to be applied in customizations?
4. What is the importance of adding an Organization Control Number to the Company Validation Table?

5. What reporting considerations should be addressed?
6. When should the system be backed up if customizations are made?
7. What additional customization considerations exist for relational customers?

The customization process

During the customization process, the implementation team will assess what has been delivered with The Solution Series and what needs to be done to tailor the system to meet specific needs.

As a system administrator, you will be called on to implement some of these customizations. This section provides you an overview of what can be customized and how to implement customizations.

Customization categories

Customizations can be put into the following categories:

- Navigation customization options
- Other user interface customization options
- Programming customization options (forms, reports, and so forth)

Navigation customization options

Much of the system navigation can be customized to suit the preference of users. For example, users can customize:

- Checklists
- Bookmarks (and Favorites)
- Toolbars

☞ *Refer to the Using The Solution Series: Administrative Solutions document to familiarize yourself with these concepts.*

- Menus
- Option lists

Other user interface customization options

More complex changes can be made using the following tools:

- Form Builder
- Virtual (variant) Form Facility

FormBuilder

Form Builder is a form-painting and design tool for customizing form displays and functions.

Some of the options available to you in Form Builder are the ability to:

- Modify the form display to remove a text box
- Highlight areas of the form by making backgrounds different colors
- Replace form prompts with an alternative language, such as Spanish
- Move grouped items to another form location using the Lasso feature

☞ *Refer to the Online Cyborg Scripting Language/English Language Programming guide for detailed information about FormBuilder.*

Virtual (Variant) Forms Facility

Virtual (variant) forms are used to permit multiple versions of the same form to be stored on a single System Control Repository, based on the country code of the organization. It allows country differences to be held as a variant ID record.

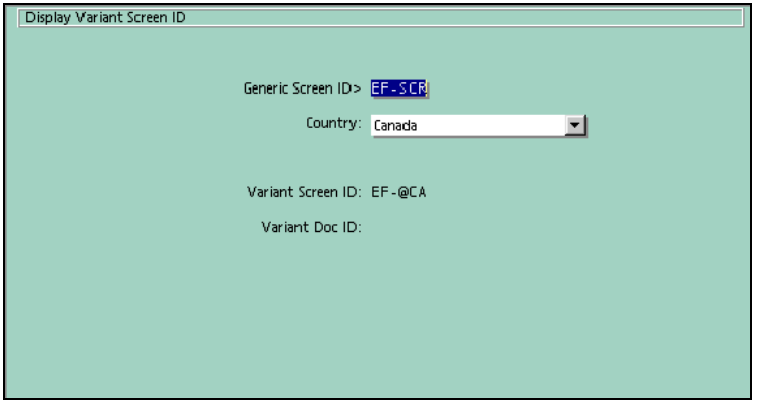
For example, if the Cyborg-delivered generic form does not meet the needs of a particular country in which your organization operates, The Solution Series system holds the country variation of that form as well as the generic version.

You can add, change, or delete variants for a country.

You can view the variant form ID established for a specific country by accessing the Display Variant Form ID form (VSXSCR).

To view all variant IDs by country for a selected delivered form, access the View Variant Forms by Country form. Variant ID records can also be changed and deleted.

The following View Variant Forms by Country form shows an example of the variant forms for the Employee Information form:



Programming customization options

Programming customization options are those that require Cyborg Scripting Language programming to achieve.

Most clients make the following types of programming customizations:

- Modification of reports
- Addition of reports
- Modification of online queries
- Addition of online queries
- Modification of delivered forms
- Creation of new forms

Interface considerations

There are input and output interfaces that need to be considered during the customization process. Interfaces handle data coming into and going out of The Solution Series system, therefore it is necessary that the interfaces work well with your Cyborg system. The types of interfaces to consider are:

- Existing
- Cyborg-delivered

Existing interfaces

You should identify the interfaces and the responsibilities of each existing interface. For Human Resources, consider the front-end maintenance. For Time and Attendance Administration, consider how time entries are made.

Cyborg-delivered interfaces

Cyborg-delivered interfaces fall into two categories—general ledger interface and third-party interfaces.

General ledger interface

Payroll Administration can provide a journal entry file that may be modified to meet the specific needs of your general ledger system. This file is normally created following a pay run. It contains monetary amounts summarized by general ledger account number. In addition, you may create a debit and credit summary report.

Third-party interfaces

Identify if you are using general ledger interfaces, other than the Cyborg-delivered interface. The third-party interfaces offered will, understandably, vary by country. In the United States, for example, the following payroll output interfaces are delivered:

- System Tax Service (STS)
- Westcorp Laser Check Printing
- Online Pay Document Print (PAYPRT)
- ACH Tape (ACH Interface File Header)
- Frick Tape
- Gates MacDonald Tape

☞ *Refer to the Technical documentation for detailed information on these interfaces.*

Utilities for customization

Cyborg provides you with many utilities to help you customize your Solution Series applications. Each of these utilities is introduced in relation to an appropriate task. The following table describes the utilities.

☞ *Refer to* **Program and Utility Quick Reference** *(on page 491) for a list of utilities and where to get detailed information.*

System Control Repository utilities

Utility	Description
COPY	COPY is used to duplicate a specified System Control Repository record type to a new name. You must use the COPY prompt form to make your entries.
DISPLY	DISPLY is used to view a specified type of System Control Repository record online or in a printed report.
DSP01	DSP01 lets you view all record types in the System Control Repository except security and object code records (object P/X). DSP01 also provides a count of the total number of object code records for each module in the System Control Repository.
EDIT	The EDIT program is used to create and maintain the System Control Repository records.
EXPORT	EXPORT extracts all or selected records of a specified object (record) type from the System Control Repository. It writes these records to FILE10 that can be printed. EXPORT is a batch program that produces an output file of the selected records.
GETSAT	GETSAT copies the internal Screen Appearance Table for a specific form to a SAT file that can be edited using Form Builder.
Maintenance In (MAINTI)	The Maintenance Input (MAINTI) utility is used to apply maintenance to the System Control Repository during installations, updates, and moving data from test environments to production. To execute MAINTI, you must provide a control record as FILE04 and the maintenance changes in FILE05.
Maintenance Out (MAINTO)	The Maintenance Out (MAINTO) utility is used to produce a file list that identifies changes made to your production System Control Repository by comparing it to a previous version of FILE01. It writes modified records to FILE10 for re-applying to the System Control Repository using MAINTI. The MAINTO process is also used to gather and re-apply user modifications when a new version or update of the system is released. To execute MAINTO, you must provide a control record as FILE04.

Utility	Description
PURGE	The Purge Utility (PURGE) allows you to delete selected records, of a specified object type, from the System Control Repository.
PUTSAT	The PUTSAT program updates the Solution Series Form Appearance Table file, runs the GENER8 program to create the form appearance logic, and runs the RELOAD program to compile the form code.

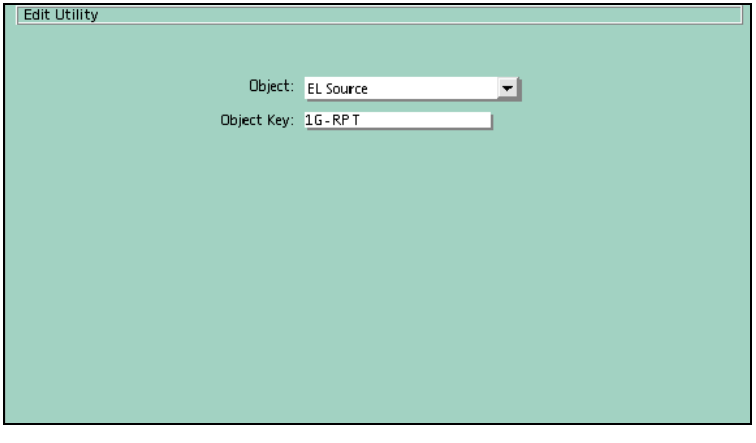
The Edit Utility

The Edit Utility (EDIT) is a full-form editor that is used to create and maintain System Control Repository records.

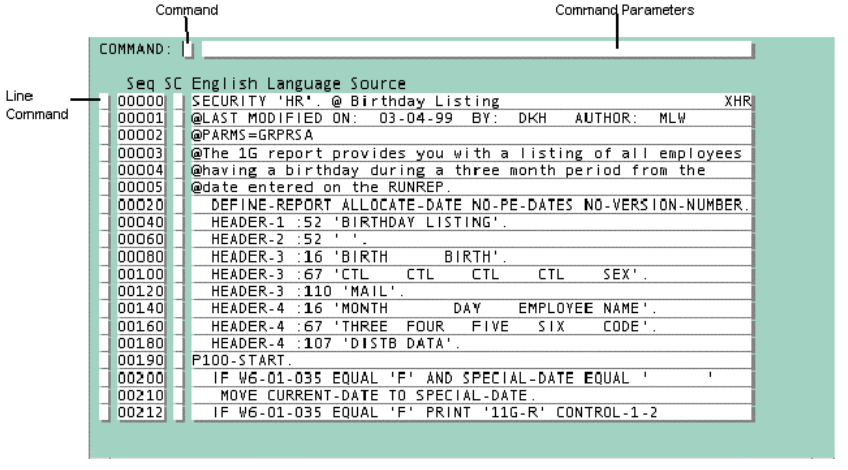
To edit records, you must select an object and enter an object key:

- Object—Each System Control Repository (FILE01) record type is assigned a one- to three-character Object.
- Object Key—The Object Key value is the name of the System Control Repository (FILE01) record you want to edit.

The following example shows the Birthday Listing (1G-RPT) being edited.



The resulting form appears with the selected System Control Repository record's object ready for editing. The layout of the form and the data depend on the object you selected.



There are two types of commands that you can use while editing records. Where you enter the command depends on the type of command.

To add, change, or delete a single line, type an 'A', 'C', or 'D' in the appropriate Line Command text box. Change or add the record directly in the text boxes on the same line as the Line Command text box.

All other commands are entered in the Command text box at the top of the form. Command parameters are entered in the text box that follows the Command text box.

The following table lists the available commands:

Command	Parameter(s)	Description
A		Auto Add Mode
B		Backup 19 lines
C	/STRING1//STRING2/ /STRING1//STRING2/1	Change all STRING1 to STRING2 Change 1 STRING1 to STRING2
D	/00220,00240,00530 00220/00350	Delete specific lines Delete range of lines
E		End Auto Add Mode
F	/STRING/ /STRING/1	Find all lines with STRING Find one line with STRING Wildcard character '=' can be used in all but first position
G	nnnnn	Go to sequence number nnnnn

Command	Parameter(s)	Description
H	00220/00350	Hold range for inserting (I) or transferring (T)
I	00205 00205/005	Insert held range, increments of 10 Insert held range, increments of 5
K	MYFILE	Key change, from file you are editing to the specified file
L		Turn logging on/off
M	n	Mini display to n number of lines Mini display off (no parameter)
N		Next form.
O	XXXMYFILE	Object change to object XXX and file MYFILE
P	nnn	Paragraph locate label Pnnn
Q		Quit *The Solution Series/ST* (3.0/4.0 only)
R		Reload or compile source code
S		Resequence lines in increments of 100
T	nnnnn nnnnn/050	Transfer Held range to line nnnnn Transfer Held range to line nnnnn, incrementing by 50
U	ALL	Undo last add, change, or delete Undo all edited lines and turn off logging
X	program code	Execute program

Note: If you are customizing using the CSL (Cyborg Scripting Language) and have logic errors, you may want to use the TRACE utility either online or in background mode to help resolve them.

Employee Database utilities

Utility	Description
Displaying Master File Records (DSP02)	DSP02 lets you view the first line (76 positions) of records in the Employee Database.
Pay Extract (PAYXTR)	Creates a sequential Batch Master File and extracts time cards and adjustments from the Employee Database. All or selected organizations may be included.
Pay Merge (PAYMRG)	Uses a sequential Batch Master File to update or rebuild the online Employee Database.
CASE Tool (RDBPGM0)	The CASE (Computer Aided Software Engineering) tool rebuilds the relational database and creates DML and DDL.

Naming Conventions

Before you begin customization of your Solution Series system, you need to be aware of Cyborg's established standards for naming the following types of records:

- Field names
- Program names
- Cyborg Scripting Language verb names
- Module codes
- Table codes
- Alternate keys
- Option list (codeset) names
- Employee segment codes
- Company segment codes
- 'Other' records
- Error message numbers
- File numbers

The naming standards have been categorized into four groups—general, product release, consulting, and customer. These standards apply to all current and future releases.

All Cyborg employees and customers should follow these standards; doing so will ensure a seamless implementation.

A Naming Administrator keeps a current list of new programs, option lists, employee segments, company segments, and files requested for all Cyborg offices, subsidiaries, and agents.

All user-defined names for fields, programs, Cyborg Scripting Language verbs, and tables must begin with the letter 'X'.

☞ *Refer to* **Naming Conventions** *(on page 465) for additional information about naming conventions.*

Organization Control Numbers and the Company Validation Table

Typically, application end users add organizations (Organization Control Numbers/Control 1-2s) online.

After these companies have been added online to the Employee Database, their Organization Control Number values must be added to the Company Validation Table (RPT20; system generator R.RPT20). This enables the P2EDIT program and the Calculate Pay (PAY-CP) form to recognize a company added online.

Organization Control Numbers are added to the Company Validation Table using an override transaction.

☞ *Refer to the Company Payroll Setup guide for information on updating the Company Validation Table.*

Reporting considerations

This section covers considerations for reporting.

Delivered reports

There are two types of reports delivered with your Cyborg system report generator (RG) and Cyborg Scripting Language (CSL).

Report generator reports

RG reports are only applicable to the Payroll application. Most of the standard reports produced from the batch payroll process are batch RG reports. These can be modified using the report generator (RG) language or by contracting with Cyborg consultants.

Cyborg Scripting Language reports

A number of CSL reports are delivered as part of the base system. You can modify any of these CSL reports, provided you have the proper security profile

In addition to modifying existing reports, you can also add new CSL reports designed to your specification.

It is recommended that any program that needs modification be copied and renamed. This ensures that Cyborg changes can be applied with a minimum of difficulty.

The new name should begin with an 'X'; for example, the 1A-RPT should be renamed to X1ARPT before customizing it.

There are two methods of adding or modifying a CSL report:

- Use the CSL programming facilities. This method requires CSL programming knowledge.
- Use the Solution View WRITER facility. This method requires no programming knowledge. The Solution View WRITER facility can only be used to modify reports that were originally written using this facility. This does not include the CSL reports delivered as part of the install.

Adding user segments

The New Fields Definition program, NEWSCR (in Solution View), should be used to create user segments. This permits CBSV to dynamically build the relational structures needed to contain the user segment information in the relational database.

In a relational environment, NEWSCR not only builds new forms, but calls a Cyborg Scripting Language program, NEWTAB, that generates dynamic SQL to create the new table for storing the new segment's data.

When adding user-defined segments to the system, users must complete the following tasks to ensure the data dictionary has the information required by the CASE tool to generate the necessary DDL and DML statements:

Type of data being added/modified to user-defined data	**Tasks**
Employee Database organization or employee	Add new segments using NEWSCR or Code form-access statements in Cyborg Scripting Language.

New segments defined through NEWSCR produce F, RFM, and RFT records that are used to create dynamic SQL for the creation of the new table and subsequent data manipulation. The online application uses dynamic SQL to access data.

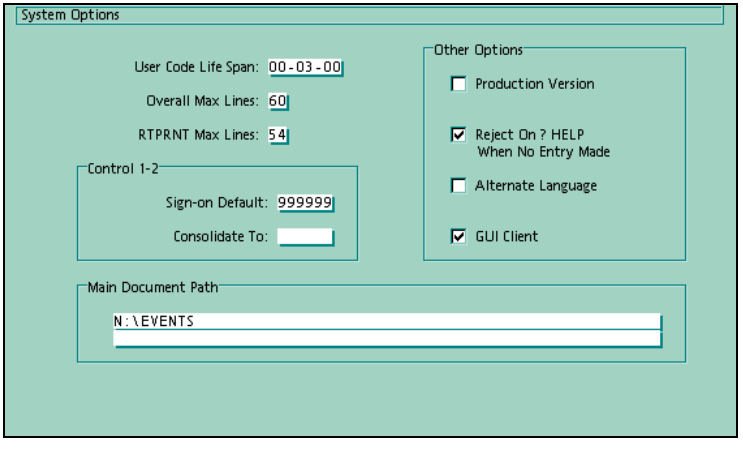
Refer to **Performance Tuning for Relational Databases** *(on page 351) for information on converting dynamic SQL to static SQL.*

Letter communication event considerations

Document templates are created when a letter or email communication event is set up. These templates contain the body of the letter or email, which can include text and Solution Series merge-data information:

- lettereventname.doc
- lettereventname.dat
- emaileventname.txt

Where the templates are stored is important. The default location is specified by the 'Main Document Path' text box on the System Options (SCOPTS) form. The following example shows the default location for letters on the N drive in the Events directory:



Communication events that will be used by multiple users should be stored on a network drive. This allows any user who might trigger the event, either manually or automatically through an action or condition, access to the templates.

Note: *The user can override the default location for only the letter templates using the Options dialog. After the letter communication event is set up, the template files (lettereventname.doc and lettereventname.dat) would have to be copied from the network drive to the user's PC to the override location specified on the Options dialog.*

☞ *For more information on the user Options dialog, refer to the Using The Solution Series: Administrative Solutions guide.*

☞ *For more information on setting up communication events, refer to Optimizing System Features.*

Backup recommendations

Cyborg recommends that you back up your system prior to and following any customization. Cyborg can help you recover your data if you follow the recommendations for backing up your data.

☞ *Refer to* **Setting Up Environments** *(on page 75) and* **Using the Backup and Restore Utilities** *(on page 259) for more specific information about backing up your system.*

PAYXTR and PAYMRG

Two programs, PAYXTR and PAYMRG, are used to create a sequential master from your online Employee Database. You can then create a new online Employee Database from the sequential master.

You will use these programs in the following situations:

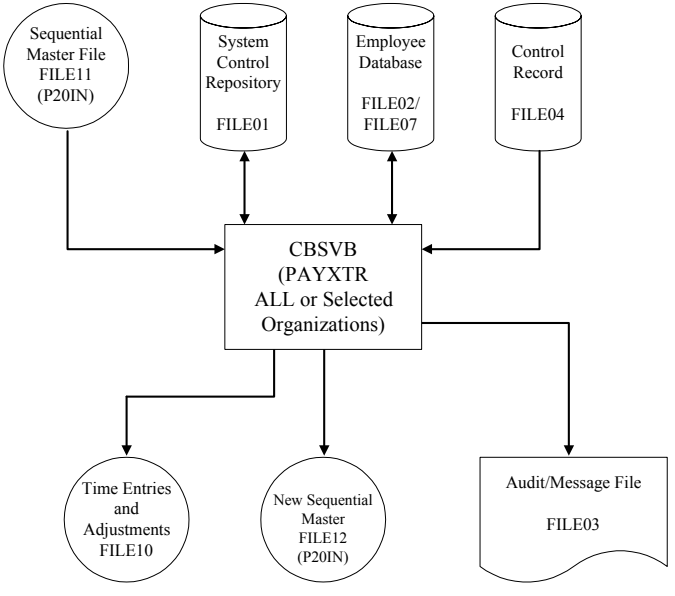
- As part of the normal payroll cycle
- When Report Generators are being added, changed, or deleted
- To clean up and reorganize your Employee Database if you do not use Payroll Administration
- To recreate the relational database anytime you add a new table or modify an existing table
- To reset session numbers (1–9949 for Solution Series sessions and 9950–9999 for *ESS* session pooling)

For The Solution Series Versions 4.5, 4, and 3, when using PAYXTR and PAYMRG during a Payroll cycle, you can choose to extract and merge all or only selected organizations being paid. For all other situations, you run PAYXTR and PAYMRG for all organizations.

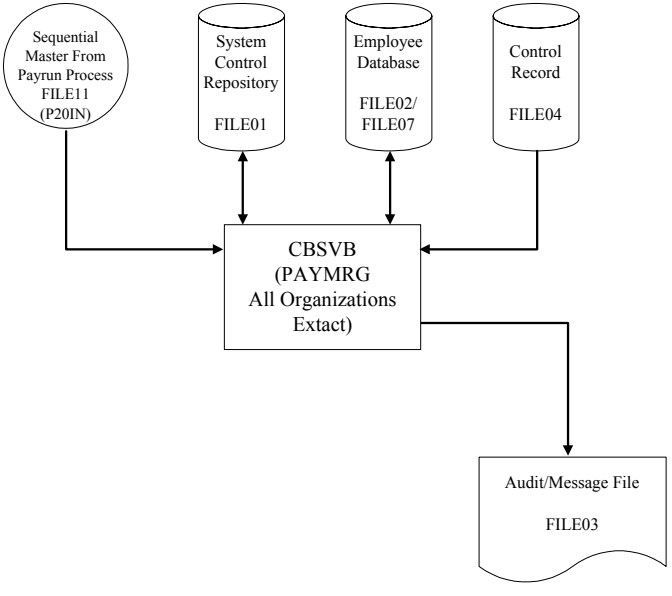
Note: *If you are using The Solution Series 4.5.1 Payroll checklist; do not run PAYXTR and PAYMRG separately.*

In The Solution Series 4.5.1 if you are using the Payroll checklist you can only pay ALL the companies. If a Selective payrun needs to be done, run a batch job using the 4.5 jobstreams and do not use the Payroll checklist.

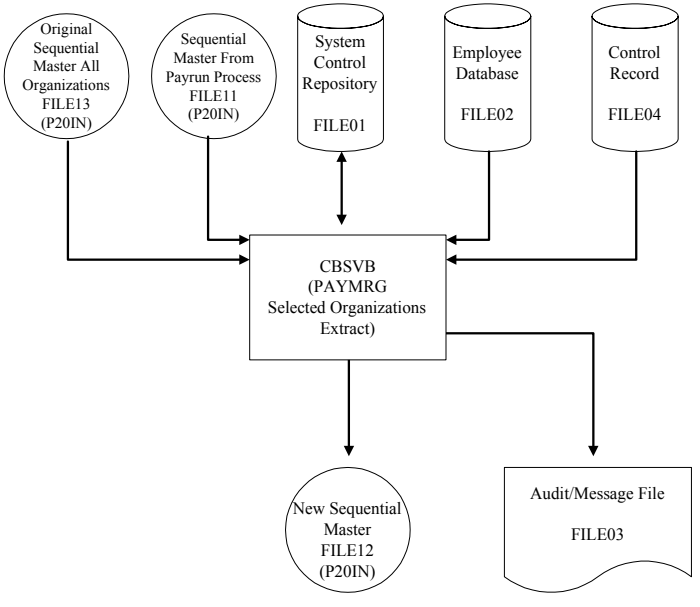
The following figure shows the flow of Pay Extract for either all or selected organizations:



The following figure shows the flow of Pay Merge when used for all organizations:



The following figure shows the flow of Pay Merge when used for selected organizations:


Original Sequential Master All Organizations FILE13 (P20IN)
Sequential Master From Payrun Process FILE11 (P20IN)
System Control Repository FILE01
Employee Database FILE02
Control Record FILE04
CBSVB (PAYMRG Selected Organizations Extract)
New Sequential Master FILE12 (P20IN)
Audit/Message File FILE03

Relational considerations

Users of the relational version of The Solution Series should consider the following:

- When to rebuild the database
- Customization of delivered relational database tables
- Addition of new relational database tables
- The CASE tool

When to rebuild the database

The database must be rebuilt under the following conditions:

- A new company or employee data segment is added outside of the NEWSCR process
- An existing company or employee data segment is modified by adding new fields to the segment or changing the name or definition of an existing field
- A new user application table is added to the System Control Repository
- An existing application table on the System Control Repository is modified by adding a new field or redefining an existing field

Customization of delivered relational database tables

The Solution Series is delivered with numerous relational tables.

If you need to store additional information, Cyborg recommends that you add a new segment (table), rather than modifying the delivered relational tables.

If you do modify one of these tables, you must make your modifications first to the System Control Repository. The changes must then be exported as input to The Solution Series CASE tool (RDBPGM0).

☞ *Refer to* **Relational Tables and Views** *(on page 403) for a complete list of the tables and views delivered with the system.*

Addition of new relational database tables

You should use the New Fields Definition (NEWSCR) program to add user segments. This permits CBSV to dynamically build the relational structures needed to contain the user segment information in the relational database.

If you are using SQL Server, the method described above will not build all the menu and view records for the table for you. You must establish menu records and view names, and then recreate the database.

The CASE tool

The CASE tool, RDBPGM0, is a Cyborg-delivered COBOL program that generates the data definition language (DDL) to define the relational database and tables (with associated indexes and views) from The Solution Series data dictionary.

In addition, it generates the data manipulation language (DML) to process the data within these tables.

All generated DDL and DML use embedded, static SQL.

When to use the CASE tool

After the installation, you will use the CASE tool after you:

- Complete modifications to existing data definitions
- Alter a delivered table, create a new table, or drop a table
- Convert generated dynamic SQL to static SQL

Because the precompiling and compiling of the DDL and DML are done on the database server, all SQL is *native* to your particular RDBMS.

RDBPGM

RDBPGM is a repository for programs RDBPGM0, RDBPGM2, RDBPGM3, and RDBPGM4. Use the Cyborg-delivered job JPUL_RDB to extract these programs.

You need to extract RDBPGM0 if you have overrides to the CASE tool. Overrides can only be applied to RDBPGM—not to RDBPGM0, RDBPGM2, RDBPGM3, or RDBPGM4.

Program/subroutine descriptions

The following table lists and describes each program and subroutine generated by the CASE tool:

Program	Description
RDBPGM1	The program generated by RDBPGM0 that contains the data definition language (DDL) statements to create tables, indexes, and views.
RDBPGMA	The subroutine that handles inserting a new row in a table.
RDBPGMB	The subroutine that handles selecting data from a row in a table, and passing it to CBSV.
RDBPGMC	The subroutine that handles updating values in an existing row.
RDBPGMD	The subroutine that handles deleting an existing row from a table.
RDBPGME	The subroutine called when a PAYMRG 171 process is run for all organizations. It removes all rows from all tables in preparation for reinsertion of data from the P20 file. It also disables then re-enables all indexes (where applicable).
RDBPGMF	The subroutine called when a PAYMRG 222 process is run for selected organizations. It deletes all rows from the appropriate tables that belong to the organization(s) being paid.
RDBPGMG	The subroutine that rebuilds the IDX records on the database, recreating Organization Control Numbers and Employee Number pointers on the Employee Database.
RDBPGMH	The subroutine that provides segment and segment key length for each segment and location of dates and date type within each segment.

RDBPGM1 through RDBPGMG are COBOL programs that contain embedded SQL statements, and thus require pre-compilation. RDBPGMH does not contain embedded SQL statements, and only requires standard compilation.

Datasets

The following datasets are used by the CASE tool:

Dataset	Description
RDBPGMX	A dataset created from the data dictionary. The contents are used to generate the CREATE TABLE statements in RDBPGM1.
RDBPGMY	A dataset created from the data dictionary. The contents are used to generate the CREATE VIEW statements in RDBPGM1 and all of the DML statements in RDBPGMA through RDBPGMG. This dataset is also used to create the COBOL subroutine RDBPGMH.
RDBPGMZ	The dataset containing only CREATE TABLE statements that support the data model.

Additional programs

The following table lists and describes additional programs used in the relational version:

Program	Description
RDBPGM2	Determines what synchronization problems exist between the database tables and the Employee Database.
RDBPGM3	Reports the number of entries per segment/table for a P20 file.
RDBPGM4	Corrects invalid data (date and decimal) on a P20 file.

The CASE tool job stream

The job stream to run the CASE tool requires the following setup:

INPUT	FILEIN1 FILEIN2	Control record
OUTPUT	FILEOT1 FILEOT2 FILE0T3 FILEOT4 FILE0TA FILEOTB FILEOTC FILEOTD FILEOTE FILEOTF FILEOTG FILEOTH	RDBPGMX RDBPGMY RDBPGMZ RDBPGM1 RDBPGMA RDBPGMB RDBPGMC RDBPGMD RDBPGME RDBPGMF RDBPGMG RDBPGMH
EXECUTE	RDBPGM0	

The data dictionary and DDL/DML

The Solution Series data dictionary, the Field Name Table (F records) and Field Table Menu (RFM records), serves as the basis for the generation of all DDL and DML.

The data dictionary contains information about each field used in the system.

All option lists, and certain application tables from the System Control Repository are replicated into relational tables.

All Employee Database record segments are stored in relational tables.

The DML subroutines and CBSV

Once the relational tables have been built using the generated DDL statements, the generated DML statements are used in application processing.

Note: *The Solution Series CBSV programs execute I/O requests on behalf of the Cyborg Scripting Language application programs. When an application makes a request for data, CBSV makes a call to the appropriate DML subroutines.*

The following scenario illustrates the connection between the DML subroutines and CBSV:

1. The application makes a request to CBSV.
2. CBSV calls the applicable DML subroutine.
3. The DML subroutine makes a request to the RDBMS to execute the SQL to satisfy the request.
4. The RDBMS passes the return code and data (if applicable) back to the DML subroutine.
5. The DML subroutine passes the return code and data (if applicable) to CBSV.
6. CBSV passes the return code and data (if applicable) back to the application.

Detailed Directions

Tasks

Using the COPY utility

To copy a System Control Repository object, follow these steps:

1. Access the Copy Utility (COPY) form

Access this form by selecting:

Component: Development Tools
Process: System Control Repository Utilities
Task: Copy

2. **Select the Object**
   Select the type of System Control Repository record that you want to copy.

3. **Type the Object Key**
   Type the name of the record (program, Option list, field, and so forth), that you want to copy from in the Object Key text box.

4. **Type the Object New Key**
   Type the new name of the record (program, Option list, field, and so forth) in the Object New Key text box.

5. **Save the form**
   The existing records are copied to the new record name. The following message is displayed:

   ---Complete---

Using the online DISPLY utility

To display a System Control Repository object, follow these steps:

1. **Access the Display Utility (DISPLY) form**
   Access this form by selecting:

Component: Development Tools
Process: System Control Repository Utilities
Task: List Control Repository Object

2. **Select the Object**
   Select the type of System Control Repository record that you want to display.

3. **Type the Object Key**
   Type the name of the record (program, Option list, field, and so forth), that you want to display in the Object Key text box. A wildcard, '=', may be used for any characters in the Object Key.

4. **Select 1st Line Only (optional)**
   If you want to display only the first line of the record, select this checkbox.

5. **Save the form**
   The System Control Repository record is displayed.

Using the List Control File Records (DSP01) utility

To list any of the records on FILE01 except security and object code records, follow these steps:

1. Access the Display Control File form

Access this form by selecting:

Component: Development Tools
Process: System Control Repository Utilities
Task: List System Control Repository

2. Enter a key value

Enter 'START' to view the file from the beginning or a more specific key, for example, 'C AT01' to move directly to a specific record.

3. Press ENTER

Press ENTER to view the record on FILE01.

Using the System Control Repository editor (EDIT)

To edit a System Control Repository object, follow these steps:

1. Access the Edit Utility (EDIT) form

Access this form by selecting:

Component: Development Tools
Process: System Control Repository Utilities
Task: Edit Control Repository Object

2. Select the Object

Select the type of System Control Repository record that you want to edit.

3. Type the Object Key

Type the name of the record (program, Option list, field, and so forth), that you want to edit in the Object Key text box.

4. Save the form

The form appears with the requested object or an error message if the object is not found.

The System Control Repository Editor Form's entry fields are tailored to each record type; therefore, the appearance of the Edit Form depends on the object you selected.

5. Edit the data

Type an 'A' (Add), 'C' (Change), or 'D' (Delete) line command in the first (unlabeled) text box of the Edit form. Type the appropriate data in the remaining field(s). If deleting, no additional data is required.

Optionally, you can enter a command in the Command text box to maintain System Control Repository records. Commands include finding a string, changing a string globally, and

going to a specific sequence number. For a list of commands, type '?' in the Command text box. Many of these commands only apply to Cyborg Scripting Language source records.

6. Save the form

The system accepts the data and places your Operator ID in the right margin of all CSL source lines you changed or added. If deleting, the specified line(s) is deleted.

Using the record delete (PURGE) utility

To purge a System Control Repository object, follow these steps:

1. Access the Purge Utility (PURGE) form

Access this form by selecting:

Component: Development Tools
Process: System Control Repository Utilities
Task: Purge

2. Select the Object

Select the type of System Control Repository record that you want to purge.

3. Type the Object Key

Type the name of the record (program, Option list, field, and so forth), that you want to purge in the Object Key text box.

4. Save the form

A confirmation form is displayed.

5. Select Perform Purge

Select the Perform Purge checkbox to confirm purging the object.

6. Save the form

The existing record is purged. The following message is displayed:

---Complete---

Using the EXPORT utility

To extract System Control Repository records, you use the EXPORT utility. You run this utility via background processing as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03 FILE10	Audit/Message File Extracted Records File
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	EXPORT	Program name
31–33	Object code	The object code of the data to be extracted
34-40	Object-key of the specific record(s) to be extracted	The first seven positions of the key. To specify more than one record, use an equal sign (=) as a wild card for any character.
41-53	Object-key of the specific records(s) to be extracted	The additional key. Positions 8-20.
54	Y	(Optional). Use this if you wish to extract only the first line for each record.

To extract all human resource module option list values, the control record would look like this:

```
         1         2         3         4         5
12345678901234567890123456789012345678901234567890123456789
                     EXPORT  C/VHR===
```

EXPORT may also be run online.

Updating the System Control Repository (MAINTI)

To update the System Control Repository, use the Maintenance In (MAINTI) utility.

Execute this utility in the background as follows:

INPUT	FILE01 FILE02 FILE04 FILE05	System Control Repository Employee Database Control Record File System Control Repository Updates
OUTPUT	FILE03 FILE10	Audit/Message File Compile Control Records
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	MAINTI	program name

The System Control Repository Updates on FILE05 have the following syntax:

In these positions	Enter	Description
80	'A', 'C', 'D', or Blank	The function to be performed: Add, change, or delete. Blank defaults to Add.

Sequential Output FILE10

Compile transactions are output to FILE10 for each program that is updated by the MAINTI updates. These may include RELOAD, RETYPE, RECALC, or REEDIT control records depending on the type of source code maintained.

These transactions can then be used to compile the programs to have the changes take effect.

Creating a Difference File (MAINTO)

To create a Difference File, use the Maintenance Out (MAINTO) utility.

Execute this utility in batch as follows:

INPUT	FILE01 FILE02 FILE04 FILE05	System Control Repository Employee Database Control Record File Sequential backup of original System Control Repository
OUTPUT	FILE03 FILE10	Audit/Message File Difference File
EXECUTE	CBSVB	

Note: FILE05 must be a sequential backup of the System Control Repository created using The Solution Series backup utilities BACKEM or BACKUP (version 3.0 on the PC Solution only).

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	MAINTO	program name

Using the List Employee Data Records (DSP02) utility

To view the first 76 positions of records on FILE02, use the Display Application File form.

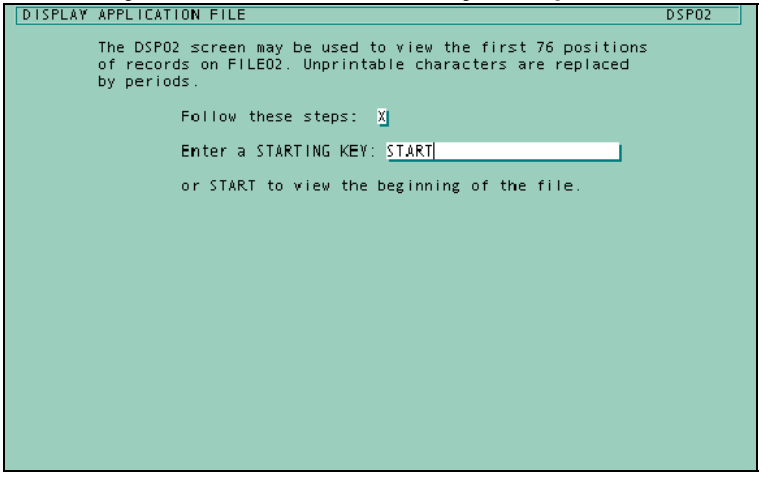
1. Execute the List Employee Database Records utility

You execute this utility by selecting:

Component: Development Tools
Process: Employee Database Utilities
Task: List Employee Database Records

The Display Application File form is displayed.

2. Enter a key value of START or the key of a specific record



3. Press Enter

Getting a form for input into Form Builder (GETSAT)

To get a SAT file that can be customized using Form Builder, use GETSAT.

1. Access the Tools menu

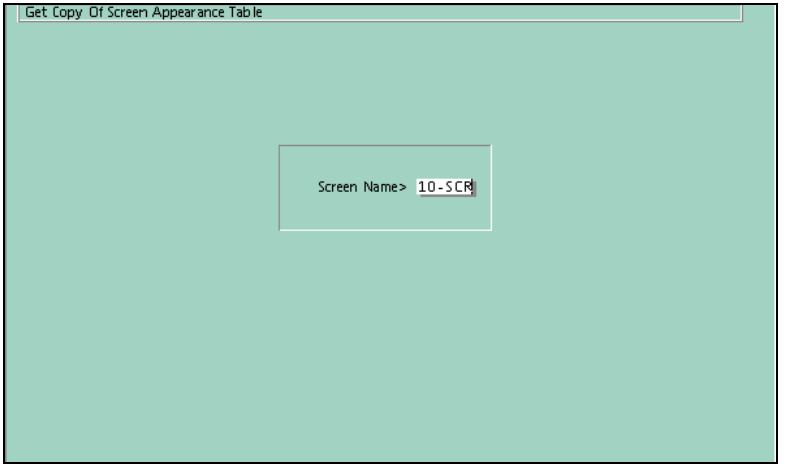
Component: Development Tools
Process: Programming Utilities
Task: Extract Form Appearance Table

2. Enter the form designation

Type the six position ID of the form you want to modify.

In this example, we have entered '10-SCR'.

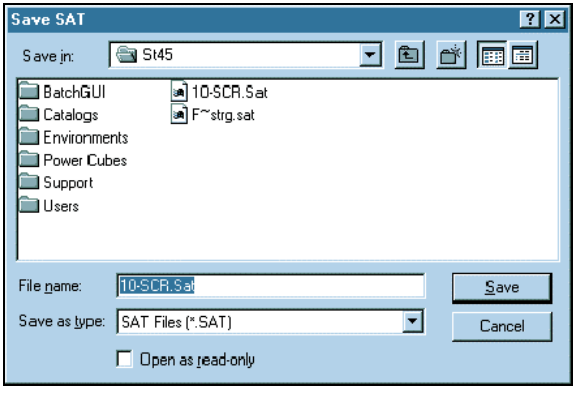
Remember to use uppercase letters.



3. Press Enter

4. Review the Save SAT or SAVE As dialog

The Save SAT dialog box is displayed after you press Enter.



5. Complete the Save SAT or SAVE As dialog

Enter the File **N**ame that the SAT file should be saved as, the Dri**v**e, and the **F**older in which to save the SAT file.

6. Click Save or OK

Click Save.

A 'Complete' message appears indicating that the SAT file has been created.

Insert a revised SAT form into The Solution Series/ST (PUTSAT) online

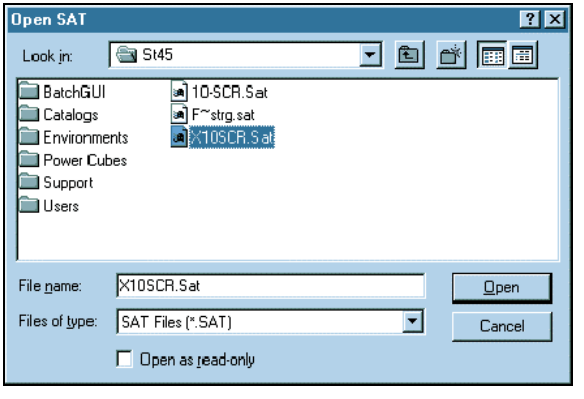
When you have finished using Form Builder/ScreenMaker to revise your form, you will need to insert it into The Solution Series in order to compile it and use it.

1. Use the Tools menu to update the SAT file

Component: Development Tools
Process: Programming Utilities
Task: Update Form Appearance Table

2. Open the SAT file

Select the directory where the revised SAT file is located and enter the File **n**ame.



3. Click on OK or press Enter.

The Screen Appearance Table (SAT) file is imported into The Solution Series, the form appearance logic is generated by the GENER8 program, and the form program is compiled.

When the compilation is complete, a 'Reload Is OK' message displays.

Note: If a 'Reload Is Bad' message displays, correct the problem and then perform Step 1 again.

4. Check your design

Execute the form in The Solution Series to verify that the form is working as you expected.

(Optional) Using background processing to load the revised *.SAT file

1. Run PUTSAT in batch

The PUTSAT program updates the Screen Appearance Table (SAT) file, runs the GENER8 program to create the form appearance logic, and runs the RELOAD program to compile the form code.

Execute this utility in batch as follows:

INPUT	FILE04	Control Record File
	FILE05	Screen Appearance Table (*.SAT)

OUTPUT	FILE03	Audit/Message File
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23-28	PUTSAT	Program name

Control record example:

```
          1         2         3         4         5
1...5....0....5....0....5....0....5....0....5....0....5
                       PUTSAT
```

2. Check your design

Execute the form in The Solution Series to verify that the form is working as you expected.

Using the Pay Extract (PAYXTR) utility

To create a sequential batch Master File (P20) and extract time entries and adjustments from the Employee Database, use the Pay Extract (PAYXTR) utility.

Pay Extract can be run for all or selected organizations. Execute this utility as a background process as follows:

INPUT	FILE01	System Control Repository
	FILE02	Employee Database
	FILE04	Control Record File
	FILE11	Previous Batch Master File
OUTPUT	FILE03	Audit/Message File
	FILE10	Time cards and adjustments
	FILE12	Extract batch master file (P20)
EXECUTE	CBSVB	

The Pay Extract control record on FILE04 for all organizations has the following syntax:

In these positions	Enter	Description
23–28	PAYXTR	program name
31–40	ALL	

The Pay Extract control record on FILE04 for selected organizations has the following syntax:

In these positions	Enter	Description
23–28	PAYXTR	program name
31–36	PAYxxx	The name of the organization selection list (PAYC12).

The Pay Extract control record on FILE04 has the following **optional** syntax:

In these positions	Enter	Description
39	T	To have security downgrade to inquiry only on extracted organizations.
40	F	Indicates a rerun of the same pay extract.
41-45	NORPT	No report generators will be copied from the previous Batch Master to the new Batch Master.

Using the Pay Merge (PAYMRG) utility

To update the Employee Database (Master File; FILE02), you use the Pay Merge (PAYMRG) utility.

You can run the Pay Merge (PAYMRG) utility for all or selected organizations. Which you will run depends on the type of Pay Extract (PAYXTR) that was run.

With a Pay Merge of all organizations, you execute CBSVB as follows:

INPUT	FILE01 FILE04 FILE11	System Control Repository Control Record File Batch Master File from Pay Extract or Maintenance Run
OUTPUT	FILE02/ FILE07 FILE03	Employee Database (written to as FILE07 on some platforms) Audit/Message File
EXECUTE	CBSVB	

The control record on FILE04 with a Pay Merge of all organizations has the following syntax:

In these positions	Enter	Description
23–28	PAYMRG	program name
41	1	FILE11 is the only input
43	7	create a new FILE02
45	1	constant for complete rebuild

With a Pay Extract of selected organizations, you execute CBSVB as follows:

INPUT	FILE01	System Control Repository
	FILE02	Employee Database
	FILE04	Control Record File
	FILE11	Batch Master File from Step 3
	FILE13	original Batch Master File of all organizations
OUTPUT	FILE03	Audit/Message File
	FILE12	updated Batch Master File of all organizations
EXECUTE	CBSVB	

The control record on FILE04 with a Pay Merge of selected organizations has the following syntax:

In these positions	Enter	Description
23–28	PAYMRG	program name
41	2	FILE11 and FILE13 are inputs
43	2	update the existing FILE02
45	1	copy Report Generators from FILE11 to FILE12
	2	copy Report Generators from FILE13 to FILE12

The following control record entries are optional for both types of Pay Merge (all organizations or selected organizations).

In these positions	Enter	Description
31	blank	all History records written to FILE02 regardless of creation date
	H	No History records written to FILE02.
32	blank	all Labor records written to FILE02 regardless of creation date
	L	No Labor records written to FILE02.
33–38	YYMMDD	History and/or Labor records created since this date will be written to FILE02 unless H or L is indicated in position 31 or 32.

In these positions	Enter	Description
40	A	RDBMS only—to insert or replace only new/changed history and labor into relational tables
47	X	to have object code from FILE01 written to new FILE02 on all organizations PAYMRG

Using the CASE tool

To define the relational database and tables, use the CASE tool.

Execute this utility as a background process as follows:

INPUT	FILEIN1 FILEIN2	Control record Field Name Table (F) and Field Table Menu (RFM) records
OUTPUT	FILEOT1 FILEOT2 FILEOT3 FILEOT4 FILEOTA FILEOTB FILEOTC FILEOTD FILEOTE FILEOTF FILEOTG FILEOTH	RDBPGMX RDBPGMY RDBPGMZ RDBPGM1 RDBPGMA RDBPGMB RDBPGMC RDBPGMD RDBPGME RDBPGMF RDBPGMG RDBPGMH
EXECUTE	RDBPGM0	

SQL Server/Windows NT

This section shows the syntax for the input control record on FILEIN1 by environment:

The input control record for Windows NT on SQL Server is as follows:

In these positions	Enter	Description
01–03	WNT	Machine
04–06	SQL	Relational database management system

In these positions	Enter	Description
07	A	Sort type—A = ASCII, E = EBCDIC
08–15	system password	
16–45	directory path for devices	
46–53	database name	
54–55	first device number	
56–57	second device number	
58–60	Database size	number of megabyte

ORACLE/Windows NT

This section shows the syntax for the input control record on FILEIN1 by environment.

The input control record for ORACLE under NT is as follows:

In these positions	Enter	Description
01–03	WNT	Machine
04–06	ORA	Relational database management system
07	A	Sort type—A = ASCII, E =EBCIDIC
08–15	system password	
16–45	directory path for tablespaces	
46–53	database name	
54–55	first device number	
56–57	second device number	
58–60	Database size	number of megabytes

ORACLE/UNIX

This section shows the syntax for the input control record on FILEIN1 by environment:

The input control record for ORACLE under UNIX is as follows:

In these positions	Enter	Description
01–03	MF2	Machine
04–06	ORA	Relational database management system
07	A	Sort type—A = ASCII, E = EBCIDIC
08–15	system password	

In these positions	Enter	Description
16–45	directory path for tablespaces	
46–53	user name	
54–61	password	
62	unique tablespace identifier	Seventh position of tablespace names

DB2/400 AS/400

This section shows the syntax for the input control record on FILEIN1 by environment.

The input control record for DB2/400 on an AS/400 is as follows:

In these positions	Enter	Description
01–03	AS4	Machine
04–06	DB2	Relational database management system
07	E	Sort type—A = ASCII, E =EBCIDIC
08–15	collection name	

DB2/IBM MVS

This section shows the syntax for the input control record on FILEIN1 by environment.

The input control record for DB2 under MVS is as follows:

In these positions	Enter	Description
01–03	IBM	Machine
04–06	DB2	Relational database management system
07	E	Sort type—A = ASCII, E= EBCIDIC
08–15	SQLID	

Rebuilding the relational database (Relational only)

To rebuild the relational database complete the following steps:

1. Run PAYXTR

To begin rebuilding the database, run a Pay Extract for all organizations.

INPUT	FILE01	System Control Repository
	FILE02	Employee Database
	FILE04	Control Record File
	FILE11	Batch Master File

OUTPUT	FILE03 FILE10 FILE12	Audit/Message File Time cards and adjustments Extract batch master file (P20)
EXECUTE	CBSVB	

Note: If FILE10 contains time entries or adjustments, Cyborg recommends performing a maintenance run of the batch Payroll programs allowing the time entries to go into the recycle file and adjustments to be applied. The maintenance run must be run prior to running Pay Merge (PAYMRG).

The Pay Extract control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	PAYXTR	program name
31–33	ALL	

2. Export the Field Name Table records

Note: If the Change Control Facility (MAINTI) file was provided or if Field Maintenance and Edit form additions were performed online, first use EDIT to verify that the relational database flag is set for each field and the table name on the RFM record.

Export the first line of the F records and the RFM records by running EXPORT as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03 FILE10	Record count F and RFM records
EXECUTE	CBSVB	

Two control records are required, as follows:

- control record to export F records
- control record to export RFM records

The control record to export the F records has the following syntax:

In these positions	Enter	Description
23–28	EXPORT	Name of the program
31–32	F1	Field Entry
54	Y	Extract only the first line of each record

The control record to export the RFM records has the following syntax:

In these positions	Enter	Description
23–28	EXPORT	Name of the program
31–33	FTM	Field Table Name Menu

Note: It is important to remember that 'FTM' is the object code that provides 'RFM' records.

3. Run the CASE tool

This step produces the RDBPGM1 program with the DDL statements and the SQL subroutines (RDBPGMA–RDBPGMG) and COBOL subroutine (RDBPGMH) contain the DML statements.

INPUT	FILEIN1 FILEIN2	Control record FILE10 from Step 2
OUTPUT	RDBPGM1 RDBPGMA-G RDBPGMH	COBOL program containing DDL statements SQL subroutines COBOL subroutine
EXECUTE	RDBPGM0	

4. Compile RDBPGM1

5. Drop the database

6. Execute RDBPGM1 to create the new database

7. Precompile and compile the DML subroutines

1. Precompile the following SQL subroutines:
   - RDBPGMA
   - RDBPGMB
   - RDBPGMC
   - RDBPGMD
   - RDBPGME
   - RDBPGMF
   - RDBPGMG

Note: RDBPGMH is a COBOL subroutine and does not need to be precompiled.

2. Compile the following subroutines:
   - RDBPGMA
   - RDBPGMB
   - RDBPGMC
   - RDBPGMD
   - RDBPGME
   - RDBPGMF
   - RDBPGMG
   - RDBPGMH

8. Link the DML subroutines into CBSV

This step creates an executable CBSV program that contains all of the SQL needed to manipulate the data in the relational databases. This SQL resides in subroutines that are statically linked with CBSV.

If required by your environment, you must also link O4CALC into CBSVO and CBSVOT.

The database name needs to be supplied as an override to these programs.

9. Run POPF01

To synchronize the System control Repository and relational tables for option lists and specific application tables, run POPF01 as a background process.

10. Run PAYMRG

To update the Employee Database (Master File; FILE02), you run PAYMRG. You must run a PAYMRG ALL (for all organizations). If you are controlling labor and history records, you must remove the 'A' in the PAYMRG control record in position 40, which is the last position of the key field.

With a Pay Extract of all organizations, you execute CBSVB as follows:

INPUT	FILE01 FILE04 FILE11	System Control Repository Control Record File Batch Master File from Step 1 or Pay Run
OUTPUT	FILE02/ FILE07 FILE03	Employee Database (written to as FILE07 on some platforms) Audit/Message File
EXECUTE	CBSVB	

Note: If a maintenance run was necessary following Step 1 (PAYXTR), the output background Master File from the maintenance run must be used as FILE11.

The control record on FILE04 with a Pay Merge of all organizations has the following syntax:

In these positions	Enter	Description
23–28	PAYMRG	program name
40	blank	
41	1	FILE11 is the only input
43	7	create a new FILE02
45	1	constant for complete rebuild

The following PAYMRG control record entries are optional:

In these positions	Enter	Description
31	blank H	all History records written to FILE02 regardless of creation date No History records written to FILE02.
32	blank L	all Labor records written to FILE02 regardless of creation date No Labor records written to FILE02.
33–38	YYMMDD	History and or Labor records created since this date will be written to FILE02 unless an H or L is in position 31 or 32.
40	blank	History and Labor records will be rebuilt to FILE02 depending on positions 31–38.
47	X	to have object code from FILE01 written to new FILE02 on all organizations PAYMRG

Adding user application tables to the System Control Repository and the relational database

To add user tables to the System Control Repository and the relational database, complete these steps.

1. Define user application table fields using the Field Maintenance And Edit (FNAME) form

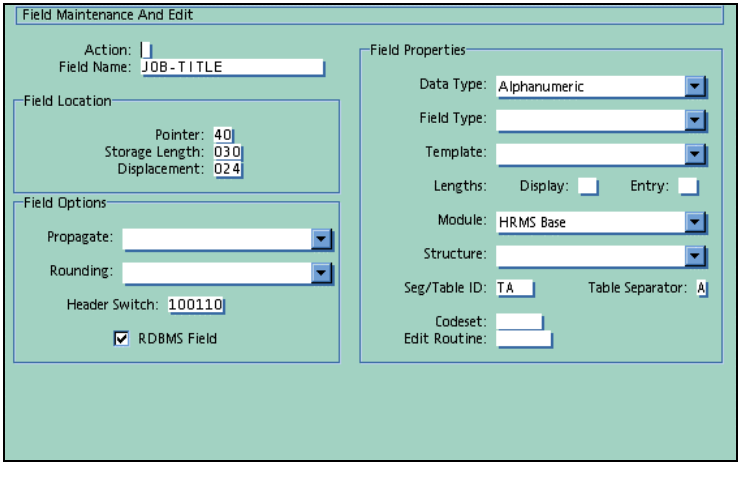
The user table field definitions you set up on this form will be used by the Relational Table Name Elements (VIEWNM) form to further identify the user table to the relational database.

1. Access the Field Maintenance and Edit form by selecting:


Component: Development Tools
Process: Fields and Verbs
Task: Define a Field

2. Define your new field, with the following considerations:

- Type '40' in the Pointer field. Pointer 40 is where all application tables reside on the System Control Repository.
- Click on the RDBMS Field to indicate that this table field will physically reside on the user table. If you do not select this option, the CASE tool will not recognize the field when it is run to create the database.
- Select the module from the Module drop-down list field that defines the application area applicable to your user table.
- Enter your table identifier in the Seg/Table ID field. Most user tables require only a 2-position identifier. The 3rd and 4th positions are used only when one table identifier has multiple variations (for example, Salary Grade tables TBS, TBB, and TBC or Control Number tables TZAX, TZAY, and TZAZ).
- Type 'X' in the Table Separator field if your logical user table spans more than one physical 80-byte record (for example, the Job Code (TA) table has an additional A and B record to define each job code).



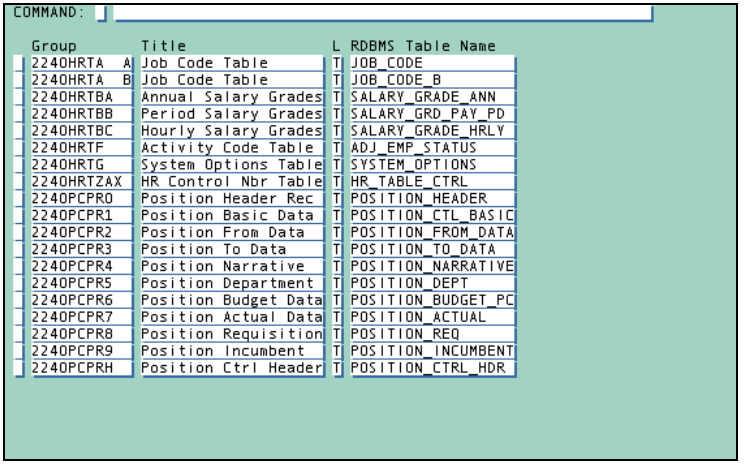
2. Establish the Field Name Table Menu (FTM) records using EDIT

Perform this operation to indicate that the user table is to be defined on the relational database and to provide the relational table name to be given to the CASE tool.

1. Access the EDIT form for the Field Name Tbl Menu object by selecting:

Component:	Development Tools
Process:	Programming Utilities
Task:	Edit Control Repository Objects

2. Select 'Field Name Tbl Menu' as the object to be edited.
3. Press Enter. The Field Name Table Menu records display on the EDIT form.


COMMAND:

Group		Title	L	RDBMS Table Name
2240HRTA	A	Job Code Table	T	JOB_CODE
2240HRTA	B	Job Code Table	T	JOB_CODE_B
2240HRTBA		Annual Salary Grades	T	SALARY_GRADE_ANN
2240HRTBB		Period Salary Grades	T	SALARY_GRD_PAY_PD
2240HRTBC		Hourly Salary Grades	T	SALARY_GRADE_HRLY
2240HRTF		Activity Code Table	T	ADJ_EMP_STATUS
2240HRTG		System Options Table	T	SYSTEM_OPTIONS
2240HRTZAX		HR Control Nbr Table	T	HR_TABLE_CTRL
2240PCPR0		Position Header Rec	T	POSITION_HEADER
2240PCPR1		Position Basic Data	T	POSITION_CTL_BASIC
2240PCPR2		Position From Data	T	POSITION_FROM_DATA
2240PCPR3		Position To Data	T	POSITION_TO_DATA
2240PCPR4		Position Narrative	T	POSITION_NARRATIVE
2240PCPR5		Position Department	T	POSITION_DEPT
2240PCPR6		Position Budget Data	T	POSITION_BUDGET_PC
2240PCPR7		Position Actual Data	T	POSITION_ACTUAL
2240PCPR8		Position Requisition	T	POSITION_REQ
2240PCPR9		Position Incumbent	T	POSITION_INCUMBENT
2240PCPRH		Position Ctrl Header	T	POSITION_CTRL_HDR

4. Type 'A' in the first field to indicate you are adding an FTM record.
5. Enter the Group name. Type '22' and the Pointer, Module, Seg/Table ID, and Table Separator for each table record you defined using the Field Maintenance And Edit form in Step 1.
6. Enter the name of the user table in the Title field.
7. Type 'T' in the L field to indicate that you want the user table to reside on the relational table, as well as the System Control Repository. If you want the user table to reside only on FILE01, leave this field blank.
8. Enter the name (using all uppercase and underscores) of the relational database table in the RDBMS Table Name field.
9. Save the form.
   The Field Name Table Menu (FTM) record is established.

3. Establish the relational database view names (ETL records) using the Relational Table Name Elements

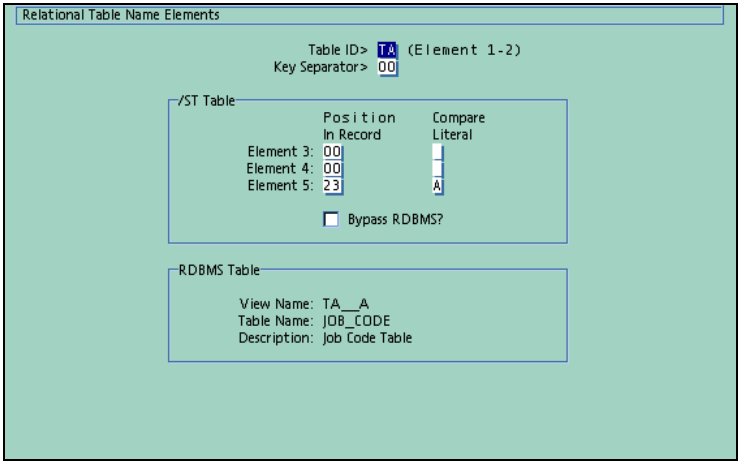
Perform this operation for every Field Name Table Menu (FTM) record established in Step 2. For most user tables, only one RDBMS View Name (ETL) record is required.

1. Access the Relational Table Name Elements (VIEWNM) form by selecting:

   Component: Development Tools
   Process: System Control Repository Utilities
   Task: Relational Table Name Elements

2. Enter the first 2 positions of the Seg/Table ID in the Table ID field.
3. Type '00' in the Key Separator field if only one FTM record was entered into the system. If multiple FTM records were entered, the first FTM record will be '00', the second will be '01' and so forth.

4. Enter the position in the user table where the 3rd position of the Seg/Table ID is located (if a 3rd position of the ID was entered). Then enter the literal contained in that position. If the 3rd position is not used, type '00' in this field.
5. Enter the position in the user table where the 4th position of the Seg/Table ID is located (if a 4th position of the ID was entered). Then enter the literal contained in that position. If the 4th position is not used, type '00' in this field.
6. Enter the Table Separator from the user table field's F-Name entry, if used. Enter the position in the FILE01 record where it can be found and the literal entry there. If the Table Separator was not used, type '00' in this field.
7. If the FTM record's L segment has been left blank, type 'X' in the ByPass RDBMS field. If the user table is to reside on both the FILE01 and the relational database (entry in L segment is 'T'), leave this field blank.
8. Save the form.



4. Recreate the relational database

1. Run PAYXTR ALL.
2. Extract F and RFM records.
3. Run the CASE tool (RDBPGM0), using the appropriate database parameters.
4. Compile RDBPGM1.
5. Drop the database.
6. Execute RDBPGM1 to create the new database.
7. Precompile and compile the DML subroutines (RDBPGMA through RDBPGMH).
8. Link the DML subroutines into CBSV (CBSVO, CBSVOT, CBSVB, and CBSVBT).
9. Compile RDBPGM.
10. Extract and compile O4CALC.
11. Run POPF01.
12. Run PAYMRG 171.

See also:

- Relational Considerations ***(on page 130)***

To learn the implications of customizing delivered tables with new fields and adding new tables.

Adding a new Organization Control Number to the Company Validation Table

To add a new organization, you supply an override to update the Company Validation Table.

1. Extract the report generator source

To extract the report generator sort and format source from CYBMST, you run the P9CNVT program, using an override file as input.

System generators (0A–29) must be extracted and updated separately from application Report Generators. The sort member always precedes the format member.

You can extract multiple Report Generators in a single execution of P9CNVT, provided you extract them in the same order in which they reside in CYBMST.

The output file, FILE1, contains the Report Generator code in de-compressed format for use in the next pay or maintenance run.

You execute P9CNVT as follows:

INPUT	CYBMST P05RDR	Cyborg Master Library Reader File
OUTPUT	PRINT1 FILE1	Activity Report Report Generator source
EXECUTE	P9CNVT	

The Machine Parameter Record on P05RDR has the following syntax:

In these positions	Enter	Description
1–12		Comments
13–25	machine parameters	Codes identifying the computer, operating system, and compiler
34–80	source computer	Name of the source computer

The member selection record on P05RDR has the following syntax:

In these positions	Enter	Description
1–3	spaces	
4–5	**	
6	space	
7	R	Report Generator

In these positions	Enter	Description
8	.	Period (full stop)
9–13	SRTxx RPTxx	sort portion format portion
14–80	spaces	

Following each member selection record, you must include a delineator or trailer record. It has the following syntax:

In these positions	Enter
1–3	spaces
4–9	999999
10–80	spaces

The override parameter on P05RDR has the following syntax:

In these positions	Enter	Description
1–3	blanks	
4–7	R720	constant
8–10	sequence number	Add Organization Control Numbers in the proper collating sequence for your machine
11–15	LIT09	constant
16	U	constant
17	blank	
18	Country code	blank = US 1 = Canada 2 = UK
19-24	Organization	Enter the actual Organization Control Number
25-80	spaces	

Following is an override example, adding MYCOMP as a valid organization:

```
         1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890
TEST        mach parm            source computer
   ** T.ZZBATCH
   999999
   ** R.SRT01
   999999
   ** R.RPT20
   R720200LIT09U  MYCOMP
   999999
```

2. Run a Pay Extract (PAYXTR)

To create a sequential batch master file for input to a pay or maintenance run, run PAYXTR. To run this program, you execute CBSVB as follows:

INPUT	FILE01 FILE02 FILE04 FILE11	System Control Repository Employee Database Control Record File Batch Master File
OUTPUT	FILE03 FILE10 FILE12	Audit/Message File Time cards and adjustments Extract batch master file (P20)
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	PAYXTR	program name
31–33	ALL or schedule name for selected extract	

The following PAYXTR control record entries are optional:

In these positions	Enter	Description
39	T	to a have security downgraded to inquiry only
40	F	to re-extract companies already set to inquiry (re-runs)
41–45	NORPT	to prevent RGs from being moved to FILE12 from FILE11

3. Update the P20 Batch Master File

The next pay or maintenance run will use the output from Step 1, FILE1, to update the P20 Batch Master File with the modified system generator.

4. Update the Employee Database (PAYMRG)

To update the Employee Database (Master File; FILE02), you run a PAYMRG.

With a Pay Extract of all organizations, you execute CBSVB as follows:

INPUT	FILE01 FILE04 FILE11	System Control Repository Control Record File Batch Master File from Step 3.

OUTPUT	FILE02/ FILE07 FILE03	Employee Database (written to as FILE07 on some platforms) Audit/Message File
EXECUTE	CBSVB	

The control record on FILE04 with a Pay Merge of all organizations has the following syntax:

In these positions	Enter	Description
23–28	PAYMRG	program name
41	1	FILE11 is the only input
43	7	create a new FILE02
45	1	constant for complete rebuild

With a Pay Extract of selected organizations, you execute CBSVB as follows:

INPUT	FILE01	System Control Repository
	FILE02	Employee Database
	FILE04	Control Record File
	FILE11	Batch Master File from Step 3
	FILE13	original Batch Master File of all organizations
OUTPUT	FILE03	Audit/Message File
	FILE12	updated Batch Master File of all organizations
EXECUTE	CBSVB	

The control record on FILE04 with a Pay Merge of selected organizations has the following syntax:

In these positions	Enter	Description
23–28	PAYMRG	program name
41	2	FILE11 and FILE13 are inputs
43	2	Update the existing FILE02
45	1 2	Copy Report Generators from FILE11 to FILE12. Copy Report Generators from FILE13 to FILE12. This will result in the loss of any report generator updates during this run.

The following PAYMRG control record entries are optional:

In these positions	Enter	Description
31	blank H	all History records written to FILE02 regardless of creation date No History records written to FILE02.
32	blank L	all Labor records written to FILE02 regardless of creation date No Labor records written to FILE02.
33–38	YYMMDD	History and or Labor records created since this date will be written to FILE02 unless an H or L is entered in position 31 or 32.
39	T	to have security inquiry-only switches removed
40	A	RDBMS only—to insert only new/changed history and labor into relational tables
47	X	to have object code from FILE01 written to new FILE02

See also:

- Organization Control Numbers and the Company Validation Table ***(on page 121)***

To learn why you must add Control 1-2 values to the Company Validation Table.

Review of Questions Answered

1. What customization options are allowed by The Solution Series system?

2. What utilities does Cyborg provide to assist with the customization?

3. What standard naming conventions need to be applied in customizations?

4. What is the importance of adding an Organization Control Number to the Company Validation Table?

5. What reporting considerations should be addressed?

6. When should the system be backed up if customizations are made?

7. What additional customization considerations exist for relational customers?

CHAPTER 7

Data Conversion and Load

In This Chapter

Introduction

This section addresses important topics related to the data conversion and load processes for your version of The Solution Series system.

You have manually set up your organization's structure and data, including your organization's details, on The Solution Series at the Organization Control Number level.

The next stage in the implementation process is to extract your employee and organization data from your existing system and load that information into The Solution Series system. Included in this process is the actual conversion of data from system to system.

There are several options available for data conversion. It is very important that you assess all the possible data conversion options and decide which one(s) are best for your organization.

The data conversion phase is one that is often underestimated in terms of complexity and duration. You should carefully consider all the implications for your organization and projects, and then put together an organized plan or checklist for the actual data load process.

An integral part of the data load process is the Payroll Cycle. The Payroll Cycle is the process of producing pay using the CBSV programs together with the Payroll Process COBOL and Report Generator programs.

The Report Generator is Cyborg's proprietary language used only by the Payroll Process as its application language.

These generators are capable of producing reports, pay documents, transactions, and interface files and tapes. They are Cyborg-delivered, generic to the operating system environment, but can be customized by you, the customer.

☞ *Refer to the Year End Processing Guide for a complete listing of all the report generators.*

Tasks

You complete the following tasks to perform the data load process:

- Generate a Batch Layout (BATCHL) report
- Load static data using BATCHL transactions
- Load cumulative data using batch Payroll transactions
- Verify employee HED figures
- Verify employee tax figures

Prerequisites

Before you can begin loading data, the following tasks must have been completed:

Environment setup

Before you can load data, the appropriate environments (test, development, etc.) should be set up for The Solution Series.

☞ *Refer to* **Setting Up Environments** *(on page 75) for more information on this prerequisite.*

Customization

Before you can load data, the organizational structures (Control 1-2s) and site-specific defaults should be set up for The Solution Series.

☞ *Refer to* **Customization** *(on page 107) for more information on this prerequisite.*

Payroll setup

Before you can load data using batch transactions and P2EDIT, the appropriate payroll setup (loading report generators, and so forth) should be set up for The Solution Series.

☞ *Refer to the Company Payroll Setup and Employee Payroll Setup guides for more information on this prerequisite.*

Questions answered in this section

This section answers the following questions:

1. What kind of a data load process checklist is needed?
2. Are there data mapping tools available and what are they?
3. What data conversion method(s) should I use and why?
4. How do data types relate to data load methods?

The Data Conversion and Load Process

The data conversion and load process consists of four phases:

Phase 1: Data Conversion and Load Process Plan (on page 167)

Phase 2: Data Mapping (on page 169)

Phase 3: Data Extraction and Conversion (on page 174)

Phase 4: Data Load (on page 178)

Each of these phases requires consideration of issues involved and tasks to be undertaken. Cyborg recommends that you consider the data load process as a group or team effort. You should request the assistance of your Information Systems, Payroll personnel, and data processing team.

If The Solution Series system is new to your organization, you may need assistance from several areas outside your immediate data processing department. You may also need the assistance of Cyborg consultants. Cyborg encourages you to plan carefully for this process and allow time to make it a successful event.

Phase 1: Data Conversion and Load Process Plan

To prepare for the data load stage, the following issues are ones you should consider and make appropriate plans to address:

- Data to be extracted and converted
- History to be loaded, such as salary history
- Methods of extraction and conversion
- The data load method to use
- Quality and accuracy of data in the source system(s)
- Data ownership and responsibility for any pre-conversion clean-up
- Data duplication in two or more interfaced systems and which takes precedence if there are differences
- Comparison of duplicated data from two or more systems before and/or during the conversion process
- Minimum configuration conversion requirements
- Movement of data between hardware platforms during the conversion process
- Conversion of encoded data items to match The Solution Series requirements
- Application of cross-field validation rules during the data extraction process and reporting of errors
- Two part conversion for static data and cumulative data
- Program specification as a joint user/IT/Cyborg system task

Data Conversion and Load Process Checklist

This sample checklist is one that can be used across most platforms for the data load process of The Solution Series system. Cyborg encourages you to use this checklist as a template for creating one specific to your environment(s) and system(s).

Data Load Process Sample Checklist
1. Identify and review what has been installed (including form processing modes and formats to identify where your converted data will reside).
2. Identify and review what has been customized after the installation process.
3. Identify and review your Organization Control Numbers and other control levels.
4. Identify and review your organization's details at the Organization Control Number level (Org and OL2) including company tables, company data, table option lists, LMODEL, and chains.
5. Identify data to be extracted from your current system and where it will be loaded in the new system.
6. Identify history to be loaded into the new system.
7. Identify data extraction method(s).
8. Identify data load method(s).
9. Identify interfaces to be used.
10. Identify utilities to be used.
11. Define and develop test procedures to verify the data load.

Data Load Process Sample Checklist
12. Write a conversion program.
13. If you are using a batch layout conversion, format it to create records for each form in Cyborg's batch layout format.
14. Create a standard system backup copy of your database and Employee Database.
15. Convert the Employee Information Form.
16. Convert other employee forms.
17. If using the Batch Layout conversion method, run a small test conversion, using 20–50 employees.
18. Review all converted forms from the test conversion.
19. Review and verify the edit patterns of dates and amounts, and the placement of data on the forms to be used in the conversion.
20. Verify the data in FILE03 after each run of CBSVB.
21. Correct and reprocess any errors you find.
22. Group employee transactions by company.
23. If using the Batch Transaction conversion method, the file containing the properly formatted transactions should be used as one of the optional input files (P05T80 or P05T81) to an additional or bonus (off cycle) payroll run of the system. Complete a Payroll Run Process Control form with the necessary field values.
24. Check the Transaction Load report (from separate executions of P2EDIT) for data that was not accepted.
25. Make corrections and rerun P2EDIT until all data is accepted.
26. Check the Payroll Audit Trail report for errors, after each additional/bonus (off cycle) payroll run.
27. Merge the updated Employee Database with the database to update the database, using PAYMRG. (This should be done only if Item 23 is used.)
28. Correct and resubmit any erroneous transactions you find.
29. Validate employee wage and to-date figures using the HEDs To-Date Inquiry and Taxes To-Date Inquiry forms.

Phase 2: Data Mapping

Once you have determined what information you need to extract and convert from your existing system(s), you are ready to begin the data mapping phase of the data load process.

Data mapping is comparing the data to be extracted from your existing system(s) to The Solution Series system and identifying matching fields and field descriptions where the data will reside.

This is a critical part of the data load process and must be completed before the initial data load is attempted.

The Batch Layout Report

When matching fields and field descriptions, you must be careful to verify that the field lengths and field types also are a match.

You can check the field sizes and positions by using the Batch Layout (BATCHL) facility.

You should also check option lists to ensure that The Solution Series will accept your data.

The Batch Layout facility produces the Batch Layout Report, which lists the entry fields found on each form in the system.

The Batch Layout Report provides form-image records, field lengths, and any comments associated with each entry field for each selected form. You can request reports for one or several forms.

Following is the information from the Batch Layout Report for the Pending Plan Enrollment/De-Enrollment (90-SCR) form.

Notice that this report shows the actual names of the fields, not the labels on the form:

From	To	Field Name	Length	Comments	Format/Edit
1	8	Program Literal	008	P CONTROL	Constant
9	14	Task Number	006	T00010	Constant
15	15	Filler	001	Space	Constant
16	16	Comm-Cancel	001	Space	Constant
17	22	Company Number	006	999999	Alphanumeric
23	28	Program Field	006	90-SCR	Constant
29	29	Code-1	001	Space	Constant
30	30	Code-2	001	Space	Constant
31	40	Key Field	010		Alphanumeric
41	55	Additional Key	015		Alphanumeric
56	58	PLAN-ID-RA	003		Alphanumeric
59	68	SUSPENSE-DATE	010		MM-DD-CCYY

From	To	Field Name	Length	Comments	Format/Edit
69	69	SCREEN-CODE2-OPTS	001		PP66
70	74	CALC-ACTION-DATE	005	Pos. 001-005	MM-DD-CCYY
75	75	Continuation-Ind	001	*	Constant
1	8	Program Literal	008	P CONTROL	Constant
9	14	Task Number	006	T00020	Constant
15	15	Filler	001	Space	Constant
16	20	CALC-ACTION-DATE	005	Pos. 006-010	MM-DD-CCYY
21	21	CALC-ACTION-CODE	001		BA44
22	31	SPECIAL-DATE	008		MM-DD-CCYY
32	32	SCREEN-OPTION-1	001		Alphanumeric
33	33	SCREEN-OPTION-2	001		Alphanumeric
34	34	End of Record	001	*	

☞ *Refer to* **Report Quick Reference** *(on page 481) for more information on this report.*

Special considerations for requesting Batch Layout (BATCHL) reports

- The Employee Information (EF-SCR) form is required to add an employee to the system.

  Its BATCHL content differs slightly from other transactions. The Key field (positions 31–40) contains the employee template, LMODEL xx, where xx is your template number (there is a space between LMODEL and xx). The Additional Key field (positions 41–55) contains a unique employee number.

  After the Employee Information form has been populated with your conversion data, the employee number is placed in the Key field for all other employee forms.

- For certain forms, such as the Deduction Information from Benefit Plans (54-SCR), the Employee Earnings and Deductions (HH-SCR), and the WL Record Maintenance (WL-SCR) forms, you will want to request sections for the report.

  You request a section by entering its number in positions 43–49 of the control record.

If you are unable to map all the data from your existing system(s) to The Solution Series, you must decide whether or not to load that data or if you need to create a new field in The Solution Series system.

Additional data mapping tools

Cyborg provides a number of tools (utilities) and reports to assist you with data mapping.

Some of these are:

Data Mapping Tools (Utilities and Reports)	Description
Field Table List (FTLIST)	A utility that lets you view the field definitions online or produce a printout in batch mode. The online display is in a scrolling format. A batch run produces a printout with headings and page numbers.
Field Table Menu (F-MENU)	A utility that lets you view the attributes of the data fields on file in the Field Name Table in a user-friendly, menu-driven format.
Label to Field Cross Reference (FLABEL)	A form that provides a cross-reference between the field labels used on a form and their data dictionary field names.
Segment Layout Report (SRTFLD/F-SEGM)	A report that displays each segment's layout. See following example.
Cross Reference Report (CROSSX/CROSSP)	A report that cross-references all the fields and Cyborg Scripting Language verbs. See following example.

Segment Layout Report

POSITIONS		FIELD NAME	LENGTH	PIC	COMMENTS
1	1	SEGMENT-TYPE	001	X(001)	B
1	1	B-SEGMENT-TYPE	001	X(001)	
2	4	COMPANY-HED-NUMBER	003	9(003)	K
2	4	HED-NUM	003	9(003)	K
2	4	HED-NUMBER-1	003	9(003)	K
5	6	CATEGORY-CODE	002	9(002)	
5	6	DEDUCT-CATEGORY-CODE	002	9(002)	PP02
5	6	EARNING-CATEGORY-CD	002	9(002)	PP01
5	6	DEDUCTION-CATEGORY	002	X(015)	D PP02
5	6	EARNING-CATEGORY	002	X(015)	D PP01
7	21	HED-NAME	015	x(015)	
22	22	VACATION-FLAG-CODE	001	9(001)	PP13
22	22	VACATION-FLAG	001	9(015)	D PP13
23	25	PERMANENT-ORDER	003	9(003)	
26	28	TEMPORARY-ORDER	003	9(003)	
29	29	TC-2-HOURS	001	9(001)	PP14
29	29	TC-2-HOURS-EDIT	001	9(015)	D PP14
30	30	TC-2-AMOUNT	001	9(001)	PP15
30	30	TC-2-AMOUNT-EDIT	001	9(015)	D PP15
31	31	EARNINGS-RATE-FLSA	001	9(001)	PP04
31	31	OVERTIME-FACTOR-CD	001	9(001)	PP03
31	31	OVERTIME-TYPE	001	9(001)	
31	31	EARNINGS-FLSA-RATE	001	9(015)	D PP04
31	31	OVERTIME-FACTOR	001	X(015)	D PP03

```
 32   32      ARREARS-OVERTIME-CD          001       X(001)       PP06
 32   32      FREQUENCY-FOR-TAX-CD         001       X(001)       PP05
 32   32      TAX-FREQUENCY-CODE           001       X(001)
 32   32      ARREARS-OVERRIDE             001       X(015)       D PP06
 32   32      FREQUENCY-FOR-TAX            001       X(015)       D PP05
 33   34      DEDUCTION-FREQ-CODE          002       9(002)       PP08
 33   34      DEFAULT-FREQUENCY            002       9(002)
 33   34      EARNING-FREQUENCY-CD         002       9(002)       PP07
 33   34      DEDUCTION-FREQUENCY          002       9(015)       D PP08
 33   34      EARNING-FREQUENCY            002       9(015)       D PP07
 35   36      DEDUCTION-ARREARS-CD         002       9(002)       PP10
 35   36      DEFAULT-TYPE                 002       9(002)
 35   36      EARNING-TYPE-CODE            002       9(002)       PP09
 35   36      DEDUCTION-ARREARS            002       9(015)       D PP10
 35   36      EARNING-TYPE                 002       9(015)       D PP09
 37   38      DEDUCTION-METHOD-CD          002       X(002)       PP12
 37   38      DEFAULT-METHOD               002       X(002)
 37   38      EARNING-METHOD-CODE          002       X(002)       PP11
 37   38      DEDUCTION-METHOD             002       X(015)       D PP12
 37   38      EARNING-METHOD               002       X(015)       D PP11
 39   47      BA-AMT/PCT                   009       9(009)
 39   45      DEDUCTION-AMOUNT/PCT         007       9(007)
 39   45      DEFAULT-AMOUNT/PCT           007       9(007)
 39   45      EARNING-AMOUNT/PCT           007       9(007)
 46   46      AUTOMATIC-SETUP-CODE         001       X(001)       PP16
 46   46      AUTOMATIC-SET-UP             001       X(015)       D PP16
 47   47      PERIOD-TABLE-CODE            001       9(001)       PP17
 47   47      PERIOD-END-TABLE             001       X(015)       D PP17
 48   48      ADD-TOTAL-HOURS-CODE         001       9(001)       PP18
 48   48      ADD-TOTAL-HOURS              001       X(015)       D PP18
 49   49      HED-REGISTER                 001       X(001)       PP00
```

The Segment Layout Report above is the product of the SRTFLD, Sort, and F-SEGM processes.

Notice that several fields can occupy the same displacement of a Pointer. This allows the field to be redefined by various field names.

Cross-Reference Report

```
                      FIELD/PROGRAM CROSS REFERENCE LIST              PAGE   1
ANNUAL-AMOUNT-CHANGE  40-SCR 00340  40-SCR 00800  40-SCR 01560  40-SCR 02200
                      40-SCR 02420  40-SCR 02740  40-SCR 02760  40-SCR 02980
                      40-SCR 03320  40-SCR 03620  40-SCR 08000  40-SCR 03960
                      40-SCR 04980  40-SCR 05100  40-SCR 05180  40-SCR 06080
ANNUAL-SALARY         40-SCR 00340  40-SCR 00620  40-SCR 00640  40-SCR 00760
                      40-SCR 01140  40-SCR 01540  40-SCR 01940  40-SCR 01947
                      40-SCR 01952  40-SCR 02040  40-SCR 02180  40-SCR 02360
                      40-SCR 02380  40-SCR 02800  40-SCR 03000  40-SCR 03300
                      40-SCR 03600  40-SCR 03780  40-SCR 03940  40-SCR 04760
                      40-SCR 04783  40-SCR 04785  40-SCR 04940  40-SCR 04946
                      40-SCR 04952  40-SCR 05000  40-SCR 05080  40-SCR 05340
                      40-SCR 05940  40-SCR 05960
ANNUALIZATION-FACTOR  40-SCR 01822  40-SCR 01824  40-SCR 01840  40-SCR 01920
                      40-SCR 01943  40-SCR 01948  40-SCR 04750  40-SCR 04755
                      40-SCR 04760  40-SCR 04782  40-SCR 04784  40-SCR 04900
                      40-SCR 04902  40-SCR 04920  40-SCR 04942  40-SCR 04948
AUTO-KEY-SWITCH       EF-SCR 02290
BIRTH-DATE            EF-SCR 00840  EF-SCR 00960  EF-SCR 01680  EF-SCR 01720
```

```
                      EF-SCR 01760
COMMISSION-FLAG       EF-SCR 01320
COMPANY-ADDRESS       AA-SCR 00120
COMPANY-ADDRESS-2     AA-SCR 00120
COMPANY-CITY/PROV     AA-SCR 00280
COMPANY-CITY/STATE    AA-SCR 00200
COMPANY-NAME          AA-SCR 00080
COMPANY-NAME-2        AA-SCR 00080
COMPANY-POSTAL-CODE   AA-SCR 00280
COMPANY-ZIP-CODE      AA-SCR 00200
CONTROL-1-NAME        AA-SCR 00360
CONTROL-2-NAME        AA-SCR 00360
CONTROL-3-NAME        AA-SCR 00360
CONTROL-4-NAME        AA-SCR 00380
CONTROL-5-NAME        AA-SCR 00380
CONTROL-6-NAME        AA-SCR 00380
CONTROL-COUNTRY       AA-SCR 00160  EF-SCR 00520  EF-SCR 00760  EF-SCR 01000
                      EF-SCR 01902  EF-SCR 02540
COUNTER01             40-SCR 06560  40-SCR 06720  40-SCR 06720  40-SCR 06740
DATE-OF-TERMINATION   EF-SCR 01100  EF-SCR 01280
DEF-PAY-FREQ-CODE     EF-SCR 01980  EF-SCR 02120
DELETE-L-SEGMENT      40-SCR 07120
EEO-RACE              EF-SCR 00800
EMPLOYEE-NAME         EF-SCR 02240
EMPLOYEE-NUMBER       EF-SCR 01880
EMPLOYMENT DATE       EF-SCR 01040  EF-SCR 01220  EF-SCR 01700  EF-SCR 01720
                      EF-SCR 01760
FAIR-LABOR-CODE       EF-SCR 01140
FREQUENCY             40-SCR 01780  40-SCR 04700  40-SCR 04860
HOURLY-RATE           40-SCR 00260  40-SCR 00660  40-SCR 00680  40-SCR 00820
                      40-SCR 00960  40-SCR 01080  40-SCR 01580  40-SCR 01900
                      40-SCR 01942  40-SCR 02440  40-SCR 02820  40-SCR 03200
                      40-SCR 03220  40-SCR 03420  40-SCR 03540  40-SCR 03560
```

The Cross-Reference Report above is the product of the CROSSX, Sort, and CROSSP processes.

Notice that several programs use the same field.

Note: *See the Introduction to Cyborg's Scripting Language manual for more information on the Data Mapping Tools (Utilities and Reports) listed above.*

Phase 3: Data Extraction and Conversion

There are many approaches to data conversion. The methods presented in this section are recommended by Cyborg because they are the safest, most accurate, and produce the best results.

Before running your conversion program and applying data from your conversion file, it is very important that you create a standard system backup copy of your database.

While there are numerous approaches to converting data to the Cyborg system, the most commonly used is to build the company first, then make changes online as needed.

Employee data conversions are usually done multiple times, as conversion programs are modified. The most common approach is to delete all employee data then perform the conversion again.

Another option is to have a backup copy of the system with just company data and restore the backup.

Manual conversion methods

A manual conversion is practical if you have an aggressive production schedule (four months or less), 500 or fewer employees, or an adequate data entry staff available to enter the data.

The amount of time it takes to enter data manually by a dedicated staff is dependent on the total number of employees, the amount of information to be added, and the number of staff devoted to the task.

Manual data input via online forms

This method is generally used when manual records are the only source of data or when the accuracy of data in your existing system is questionable. It is not unusual for some data to be entered manually even when electronic data conversion is used.

Although this method is generally considered straightforward, it can be the least accurate. To avoid problems associated with inaccuracies of source data and input inaccuracies, verification checks must be included at several stages in the process.

You may want to print out the data you have on file for each employee and ask the employee to confirm that the data is correct. Manual cross-checking of the information can become extremely time consuming.

Automated conversion methods

Automated conversion requires that you decide whether your data processing personnel or Cyborg's consulting personnel will be responsible for writing the conversion program and applying the converted data to The Solution Series.

The Solution Series can accept input data in the form of pre-formatted input records. Two different types of formats are allowed:

- Input to the batch system using P2EDIT to add records to the batch master file (P20) during a maintenance or pay run. This option is available only for payroll segments.
- Input to the online data file using the Batch Layout Facility. This option is available for all data, and it is the recommended method.

The formats are quite different as the mechanisms used are also quite different.

Data conversion categories

In The Solution Series system, data that can be converted is divided into two distinct categories—static data and cumulative, or 'To date', data.

Static data includes company and employee information, such as name, address, pay rate, and salary.

Cumulative data includes payroll earnings, deductions, and tax to-date accumulation data.

Conversion categories and methods

Each data type must be converted using a specific conversion method.

These methods are:

For this data type	Use this method
Static data	BATCHL transactions
Cumulative ('To date') data	Batch transactions

Batch Layout for static data

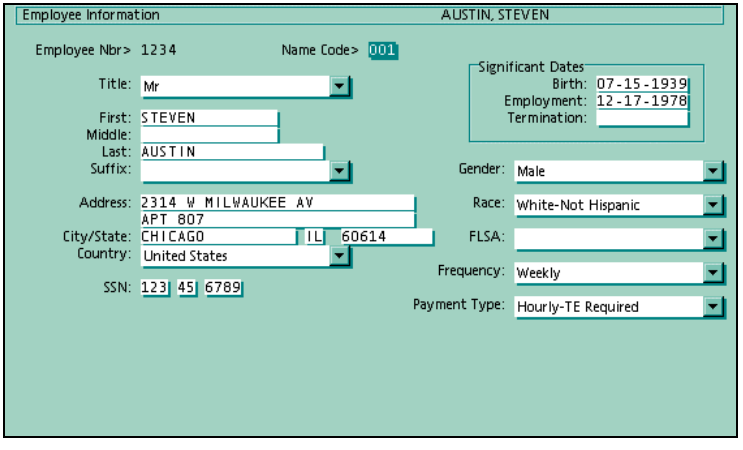
Cyborg recommends that you convert static data using the Batch Layout method. You can convert both payroll and basic human resource data. This method involves a batch process that applies the static information directly to your database, using transaction formats derived from layouts provided for all application forms.

The following example shows what your records would look like for the Employee Information (EF-SCR) form when adding a new employee:

```
         1         2         3         4         5         6         7         8
1...5....0....5....0....5....0....5....0....5....0....5....0....5....0....5....0
P CONTRLJ00010  999999EF-SCR  LMODEL 00               1234      00100307-*
P CONTRLJ00020 15-193912-17-1978STEVEN                                 AU*
P CONTRLJ00030 STIN                 M2314 W MILWAUKEE AV           01APT 8*
P CONTRLJ00040 07                       CHICAGO          IL60614      0112*
P CONTRLJ00050 34567891
```

Note: The layout of the last line (5) is dependent on whether Position Administration and Requisition Administration are in use.

The Employee Information form would then look similar to this:



Batch transactions for to-date accumulation data

For converting payroll earnings, deductions, and tax to-date accumulation data, Cyborg recommends this method. It is more efficient for converting these types of information.

To use this method, all existing data that you want to apply to Payroll Administration must be converted to Cyborg transactions.

When you convert your existing data to Cyborg transactions, group employee transactions by company. Each company must be separated by a BATCH transaction before it is entered into the sequential batch master file, P20IN.

To-date accumulations include payroll earning, deduction, net pay, taxable wage, and tax to-date figures for employees. While this method may be used to convert static data as well, Cyborg recommends that you convert static data using the batch layout method because that method validates the field content against the table option lists, if applicable. Other information, such as format, may also be validated.

A minimum of three transactions per employee are required to convert payroll hour (unit) and amount to-date figures. These transactions are:

1. KA transactions for federal, state, and local taxable wages and taxes withheld only
2. KB transactions for all to-date HED amounts
3. KC transactions for net pay

If your present system does not provide this information, you must calculate and enter all figures from field to field to ensure that accurate amounts are converted.

When applying values to the to-date fields, the values you enter must specify which to-date figures are to be updated by each adjustment.

The valid to-date values are:

1. month-to-date only
2. quarter-to-date and year-to-date
3. month-to-date, quarter-to-date, and year-to-date
4. quarter-to-date only

5. year-to-date only

☞ *Refer to the Payroll Technical guide for the layout of these transactions.*

Phase 4: Data Load

You perform the data load to move data from your existing system(s) to The Solution Series system. Cyborg provides you with several tools to assist with this task, however you may have tools specific to your environment(s) that you want to use.

Loading the data into The Solution Series system may not be completely successful on the first attempt. You may need to perform the data load more than once, particularly if you have large volumes of data to be loaded.

Data load using BATCHL transactions

The conversion data, in the form of transactions, is input as FILE04 and processed by an execution of The Solution Series background processing program, CBSVB.

The batch layout conversion method validates data in the same manner as if you were entering data directly using *T*he Solution Series forms. It checks for errors, including verifying the field content against the table option lists.

Before you begin applying converted data, you should run a small conversion test using 20–50 employees. This will establish the integrity of the program and the data being converted. Make sure that the employee sample is large enough to test all aspects of the conversion.

Review all converted forms for several employees to be sure that the data was correctly applied.

Finally, review and verify the edit patterns of the dates and amounts, and the placement of data on the forms to be used in the conversion.

After each run of CBSVB, check FILE03 for any records that are in error. Correct and reprocess any errors that you find.

Accepting warning messages

When you enter data into The Solution Series, the system validates the data. If there is a problem with the data, the system will issue a warning or reject message and reject the record.

A warning message informs you that there may be missing data or an inconsistency with the data that has been entered, which may or may not be correct for your organization.

If you know that the data in your batch record is correct and will cause a warning message to be issued, you can accept the warning message by placing an 'A' in position 16 of the batch record. This accepts the warning message and allows the record to be loaded.

Reject messages can not be accepted.

☞ *Refer to the Using Benefits Administration for specific information on loading Benefits data.*

Data load using batch transactions

The batch transaction method involves a batch process that applies information to the batch master file (P20IN) using batch transactions.

Transactions are placed in a batch input file, which is processed as P05T80 or P05T81 to an additional or bonus (off cycle) payroll run to update the batch master file (P20IN). The P2EDIT program edits the input transactions to ensure their validity.

If you perform separate executions of P2EDIT, check the Transaction Load report for data that was not accepted. Make corrections and rerun P2EDIT as many times as required until all the data is accepted.

After each additional or bonus (off cycle) payroll run, check the Payroll Audit Trail report for errors. Correct and resubmit any erroneous transaction you find.

After all transactions have been edited correctly, you need to execute the P4CALC and P5PRNT programs. The P4CALC program applies maintenance, calculates pay, and extracts reports. The P5PRNT program writes all output, including payroll checks, reports, and files of transactions to be recycled.

Note: *An off cycle (for example, additional/bonus) payroll run may be used instead of a maintenance run so that pay reports can be generated for to-date payment verification.*

To validate employee wage and to-date figures, use the HEDs To-Date Inquiry (HT-SCR) and Taxes To-Date Inquiry (JT-SCR) forms.

The HEDs To-Date Inquiry (HT-SCR) form displays the current, month, quarter, and year-to-date amounts and hours for all earnings and deductions, including net pay.

The Taxes To-Date Inquiry (JT-SCR) form displays the current, month-to-date, quarter-to-date, and year-to-date figures for all employee tax records.

The resulting file from the additional or bonus (off cycle) payroll run is then merged with your database by executing PAYMRG, the payroll merge process.

Refer to the Payroll Technical guide for additional information about PAYMRG.

Synchronization of data loads

Both loading static data using BATCHL transactions and loading cumulative data using batch transactions (with the subsequent pay merge) produce an updated random Employee Database. Therefore, you must ensure that the data you load using BATCHL transactions is not lost when the pay merge process creates a new random Employee Database.

To synchronize the loading of different types of data, you can do the following:

1. Load the static data using BATCHL transactions.
2. Run a pay extract (PAYXTR) to prepare for loading batch transactions.
3. Load the cumulative data using batch transactions.
4. Run a pay merge (PAYMRG) to create a new, random Employee Database with both the static and the cumulative data.

Parallel pay runs and testing considerations

To test your data conversion and load, perform a parallel pay run and compare the results.

Cyborg suggests that you run your systems in parallel until you are sure that the data was loaded correctly, through random sampling.

You need to ensure that your new Payroll Process is identical to the original Payroll Process. A payroll run is the best indication that the data load worked and your Payroll Process is identical to the original Payroll Process.

Some preparation and testing issues to consider prior to running parallel are:

- Establish the parallel running time frame.
- Decide when and how to perform the system parallels.
- Identify the reports to be generated.
- Decide on the time entries to be used.
- Identify the verification procedures to be used.
- Decide when and how to analyze the pay and maintenance run results.

Apply the Concepts
Outline a process for verifying data loaded through the use of BATCHL and batch transactions.

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Generating a Batch Layout Report

A Batch Layout (BATCHL) Report is used for the data mapping of static data. To generate a Batch Layout Report, you must provide a control record as FILE04.

You should have already identified the forms and form sections you will be using in your conversion.

If you are performing a new system implementation, you will most likely be performing an add (A) activity, but you may also use this utility to perform a global change (C) activity (such as changing a corporate division name or telephone area code).

The following are the input files, output files, and the program you need to generate a Batch Layout Report:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control record
OUTPUT	FILE03	Audit/Message File
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In These Positions	Enter	Description
23–28	BATCHL	Batch Layout Facility
31–36	form name	You can request only one form per control record
41	activity/mode option	A = Add C = Change (default)

In These Positions	Enter	Description
42	display option	R = Regular number of display lines for the transaction (default) S = Special number of display lines
43–49	section number	1 through 7. Enter the section number(s) of the form to appear on the report. The section numbers need not be entered in any specific position. Do not embed blanks between section numbers.
50	language	P = Primary (default) A = Alternate
75	C	This forces a page break between layouts.

Following is an example of a control record requesting the layout of the Company Name and Address (AA-SCR) form:

```
         1         2         3         4         5         6
123456789012345678901234567890123456789012345678901234567890123456789
P BATCHLJ00100  999999BATCHL  AA-SCR
```

Following is an example of a control record requesting the layout of section 1 (earnings only) of the Employee Earnings and Deductions (HH-SCR) form:

```
         1         2         3         4         5         6
123456789012345678901234567890123456789012345678901234567890123456789
P BATCHLJ00100  999999BATCHL  HH-SCR      1
```

Following is an example of a control record requesting the layout of sections 1, 3, and 4 of the Deduction Information from Benefit Plans (54-SCR) form:

```
1         2         3         4         5         6
123456789012345678901234567890123456789012345678901234567890123456789
P BATCHLJ00100  999999BATCHL  54-SCR      134
```

Following is an example of a control record requesting the alternate language code layout of the Employee Information (EF-SCR) form:

```
         1         2         3         4         5         6
123456789012345678901234567890123456789012345678901234567890123456789
P BATCHLJ00100  999999BATCHL  EF-SCR             A
```

See also:

■ The Batch Layout Report ***(on page 169)***

To learn how you can use this report during the data mapping phase of your conversion.

Loading static data using BATCHL transactions

Using this method, the Employee Database is directly updated.

You should backup the system and load the data form by form, not employee by employee.

Do this first in your test environment and verify that it has worked before attempting it in your production environment.

Using this method, you would:

1. Load all Employee Information (EF-SCR) form data.
2. Backup the system.
3. Load all Employee Name and Address (FF-SCR) form data.
4. Backup the system.

By following this approach, you are ensuring minimal recovery time, if any.

To load static data using this method, follow these steps:

1. Load the BATCHL transactions into FILE04

The output from your conversion program should be transactions in BATCHL format.

Load these into FILE04, as input to CBSVB. These transactions will directly update the random Employee Database.

2. Run the data load program

Execute CBSVB to load the data. You execute CBSVB as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database BATCHL transactions
OUTPUT	FILE03	Audit/Message File
EXECUTE	CBSVB	

3. Verify the results of the data load

Check FILE03 for errors.

Note: To override warning messages that may occur during the batch transaction load, place an 'A' in position 16 of the batch record.

See also:

- Data load using BATCHL transactions ***(on page 178)***

To learn how you can use this report during the data load phase of your conversion.

Loading cumulative data using batch Payroll transactions

Using this method, the batch master file (P20IN) is updated through a pay run. After the pay run, the loaded data is merged into the random Employee Database through a pay merge.

To load cumulative data using this method, follow these steps:

1. Extract the newly-loaded static data

To avoid overwriting the newly-loaded static data in the random Employee Database, extract it by running a pay extract (PAYXTR).

2. Load the batch transactions into P05T80 or P05T81

The output from your conversion program should be transactions in batch format. Load these into P05T80 or P05T81 as alternative input to P2EDIT.

You must use KA, KB, and KC transactions for each employee.

Keep the following in mind as you load the transactions:

- Group employee transactions by company
- Separate each company with a BATCH transaction

3. Run the data load program

To load the data to update the batch master file (P20IN), you run the payroll process for an off-cycle (bonus) payrun.

4. Verify the results of the data load

Check the following generator reports to verify the accuracy of the data load:

- Master File Print (0202)
- Master File Status (9E9E)
- Combined Register (2222)
- Tax Filing Report (2T2T)

5. Merge the loaded data into the random Employee Database

To merge the loaded data into the random Employee Database file (FILE02), you run a pay merge (PAYMRG).

See also:

- Data load using batch transactions ***(on page 178)***

To learn how to use this method for your conversion.

Verifying the employee earnings and deductions figures

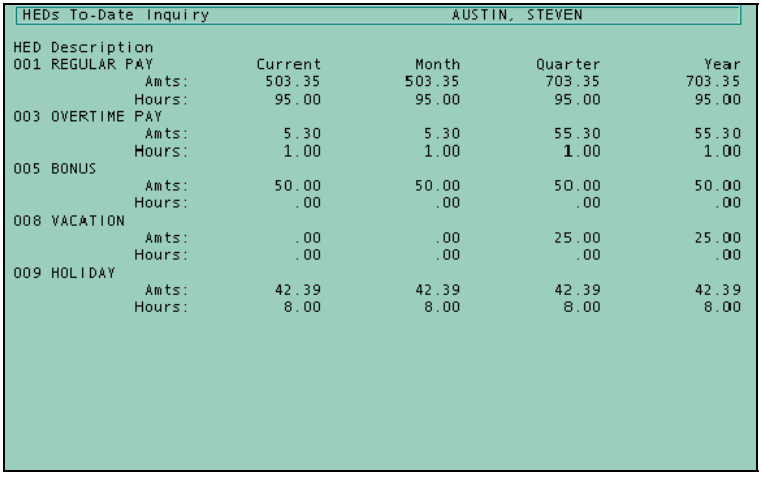
To verify the employee earnings and deductions figures, you use the HEDs To-Date Inquiry form.

1. Access the HEDs To-Date Inquiry (HT-SCR) form

Access this form by selecting:

Component: Employee Payroll
Process: Wages and Tax Adjustments
Task: View HED To-Date Information

The HEDs To-Date Inquiry form is displayed:



HEDs To-Date Inquiry — AUSTIN, STEVEN

HED Description		Current	Month	Quarter	Year
001 REGULAR PAY	Amts:	503.35	503.35	703.35	703.35
	Hours:	95.00	95.00	95.00	95.00
003 OVERTIME PAY					
	Amts:	5.30	5.30	55.30	55.30
	Hours:	1.00	1.00	1.00	1.00
005 BONUS					
	Amts:	50.00	50.00	50.00	50.00
	Hours:	.00	.00	.00	.00
008 VACATION					
	Amts:	.00	.00	25.00	25.00
	Hours:	.00	.00	.00	.00
009 HOLIDAY					
	Amts:	42.39	42.39	42.39	42.39
	Hours:	8.00	8.00	8.00	8.00

2. Verify the figures

This form displays the current, month-, quarter- and year-to-date amounts and hours for all earnings and deductions, including net pay.

See also:

- Parallel pay runs and testing considerations ***(on page 181)***

To learn what kind of preparation and testing issues to consider.

Verifying the employee tax figures

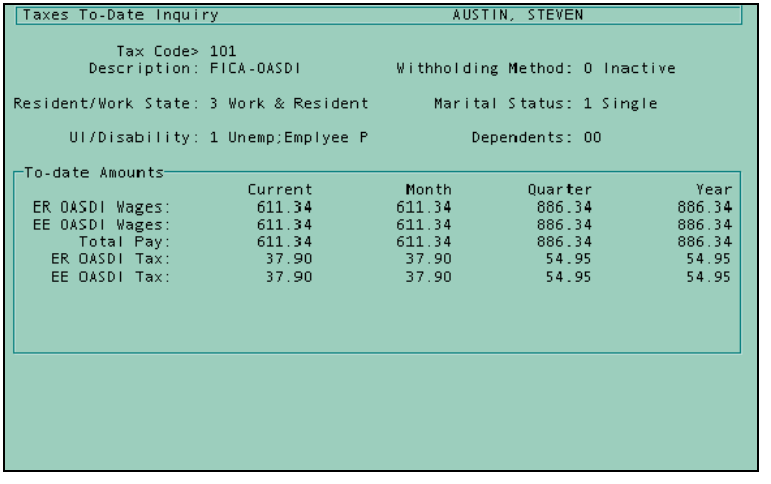
To verify the employee tax figures, use the Taxes To-Date Inquiry (JT-SCR) form.

1. Access the Taxes To-Date Inquiry form (JT-SCR)

Access this form by selecting:

Component: Employee Payroll
Process: Wages and Tax Adjustments
Task: View Tax To-Date Information

The Taxes To-Date Inquiry form is displayed:



2. Verify the figures

This form displays the current, month-to-date, quarter-to-date, and year-to-date figures for all employee tax records.

See also:

- Parallel pay runs and testing considerations ***(on page 181)***

To learn what kind of preparation and testing issues to consider.

Review of Questions Answered

1. What kind of a data load process checklist is needed?

2. What are the data mapping tools available?

3. What data conversion method(s) should I use and why?

4. How do data types relate to data load methods?

CHAPTER 8

Migration to Production

In This Chapter

Introduction

This section addresses important topics related to migrating your Solution Series test environment data to production.

The migration of data and/or code from a test environment to a production environment falls into two common scenarios:

1. A complete move of tested files and all associated data.
2. A partial move of tested data and/or code.

This section deals only with the first scenario. The second scenario is covered in Identifying Problems and Applying Temporary Fixes.

Migrating your original production data from The Solution Series test environment to The Solution Series production environment involves careful planning and preparation.

Cyborg recommends that you complete all the testing of your data while it is still in the test environment. It is important that you keep very detailed records of what you are doing and how you are doing it. The impact or results of your activities should also be recorded.

The information in this section assumes that you have already loaded your original production data into The Solution Series test environment.

Refer to **Data Conversion and Load** *(on page 163) for detailed information about the data load process.*

Tasks

You must complete the following tasks to perform the migration to production process:

- Setting up the production environment
- Moving the data files
- Preparing for migration verification
- Verifying the migration

Questions answered in this section

This section answers the following questions:

1. What does the preparation for migration to production consist of?
2. What data needs to be moved to the new production environment?
3. What utilities and reports are available to assist you in the migration?
4. What are the post-migration follow-up issues and tasks?
5. What are the relational database issues to be addressed?
6. What issues need to be addressed by HR-only customers?

Preparation for migration to production

Prior to moving your original production data from The Solution Series test environment to The Solution Series production environment, you should prepare a migration project task list, including work instructions for the migration.

Work instructions

One of the most important tasks you need to do is to verify that you have all the proper data in The Solution Series test environment.

Once in the test environment, you also need to verify that all necessary tests have been performed on the data.

Work instructions should include information such as:

- A list of what needs to be added to the test environment prior to moving it to production
- A list of tests that need to be run
- A backup schedule for the test environment
- A list of what needs to be set up for the production environment
- A list of the test data that needs to be moved into the production environment
- Verification that the production hardware can handle the capacity of the test environment data
- A schedule for running both environments (test and production) parallel until the production environment is validated
- A list of follow-up tasks that need to be addressed in the production environment
- A list of security concerns for the Security Officer

The work instructions will be very valuable to you and your Solution Series support team during the migration process, providing guidelines and troubleshooting information for a successful migration.

Size considerations for the production environment

When you are ready to migrate your test data to a production environment, you need to consider the size of your files in both environments. This directly affects the capacity of your system hardware.

Will your current hardware be able to handle all the test environment data?

Will your hardware be able to run both environments parallel for a specified amount of time?

If your production database is large, you may want to select just a portion of this database to off-load for running parallel. When you are ready to go live, you must factor in that your parallel run was done with only a portion of your actual data.

Cyborg recommends that you always maintain an adequate test environment on your system, even after you migrate to production.

The audit trail reports

You should run the Audit Trail Control 1-2/Employee Order (ISWAS) report before the pay extract and verify any changes made to the online system.

This report displays, in organization and employee order, the current field value (IS) and the previous field value (WAS).

ISWASX extracts the audit records into a file (FILE15) that is sorted and used as input to the IS/WAS Audit Trail Report (ISWASP) utility program.

ISWASP reads the sorted audit records (FILE14) and prints a current and prior field value listing for each session.

Changes made by the eCyborg Interactive Workforce to information in The Solution Series appear on the IS/WAS audit report generated from The Solution Series.

On this audit report the user making the changes is always the eCyborg Interactive Workforce and not the employee who made the change.

The eCyborg Interactive Workforce IS/WAS (ISWASE) audit report was designed to provide an audit trail for the eCyborg Interactive Workforce. This report shows the change made in the system and prints the name of the employee who made the change.

Your organization can use this report in a number of ways.

- If you are doing rollout/acceptance testing, check the audit report to see that changes made using the eCyborg Interactive Workforce are reflected in the Interactive Workforce database of The Solution Series data.
- If your organization is using eCyborg Interactive Benefits and an employee changes his or her address to another state or has a change in family status that allows him or her to update their benefit plan selections, your benefits administrator may need this information to change the employee's benefit plan.
- If an employee incorrectly entered his or her account number for the direct deposit of payroll checks, when the employee does not get their payment, your payroll department may want to check the audit report and show the employee the account number entered.

☞ *Refer to Payroll Run Changes in the eCyborg Interactive Workforce: Technical Implementation manual for more information on the ISWASE report.*

☞ *Refer to the eCyborg Interactive Workforce: Technical Administration for more information on the audit records for eCyborg Interactive Workforce.*

Production environment follow-up

When you have your production environment up and running, follow your work instructions to complete the migration process. Additional follow-up information and suggestions are discussed here.

The Client Data File

After a large number of online transactions, such as option list (codeset) changes have been applied to the System Control Repository and the Client Data File has been updated accordingly, the Client Data File should be rebuilt.

Rebuilding the Client Data File reorganizes its index file to improve the application's performance. It should also be rebuilt to correct any out-of-synchronization conditions that may have occurred.

☞ *Refer to* **Maintaining the Client Data File** *(on page 247) for detailed information about rebuilding this file.*

Production Version setting

The Solution Series is delivered with the Production Version setting switch turned OFF. Once you have migrated to production, you may want to set this switch to ON.

There are additional auditing capabilities available once this switch is set to ON.

Setting the production version switch to ON or OFF requires a judgment call.

If you set the switch to OFF, audit reports will not be produced for changes to the System Control Repository.

If you set the switch to ON, audit reports will be produced for changes to the System Control Repository.

There is an additional impact on Maintenance In (MAINTI) processing. The first error encountered during the MAINTI process will stop the process.

You can then set the production version switch to OFF, restart the MAINTI process, and then reset the switch to ON.

If you need on-site assistance, contact your account manager.

☞ *Refer to* **Setting Up Environments** *(on page 75) for additional information on the production version setting switch.*

The Solution Series system security

Your Security Officer should test all levels of The Solution Series system security for proper functionality.

☞ *Refer to* **Security Considerations** *(on page 97) and the Security Manual for additional information about system security.*

Considerations for HR-only customers

Customers using both the Payroll Administration and the Human Resources Administration components will need to run a complete pay run in the production environment to ensure that the migration was successful.

HR-only customers need only set up a production environment and then move the System Control Repository and Employee Database into that environment.

Relational issues

Customers using the relational version of the system should also maintain a test environment, just as customers using the non-relational version should. This means having a separate instance of the Cyborg database.

You can use the RDBPGM3 program to produce a report showing the amount of space required by the relational tables.

☞ *Refer to* **Data Structures and Processing Modes** *(on page 45) for more information on the RDBPGM3 program.*

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Setting up the production environment

Before you can move the files and data from the test environment, you must set up the production environment. To set up the production environment, follow these steps:

1. Determine and allocate disk space requirements

Determine how much additional disk space is required to maintain both the test and production environments.

Once this determination is made, the necessary space should be allocated for the production environment.

2. Create a 'directory' system (if applicable)

In this step, you create a 'directory' system to store the production files.

3. Allocate files (if applicable)

If required by your operating environment, allocate the files to store the production data.

4. Migrate the programs from test to production

Use your standard system utilities to perform this step.

5. Copy the job streams to the production area (as required)

All of the job streams required to run the system in production should be copied to the production area, or be made accessible.

6. Modify the job streams

Modify the job streams to reflect the production area directory system set up in Step 2.

See also:

- Size considerations for the production environment ***(on page 192)***

For some suggestions on how to address your test environment size requirements.

Moving the data files

After setting up the production environment, you can move the data files.

Note: The exact instructions for moving these files will vary by platform.

1. Copy FILE01 and its index (if applicable)

Copy the System Control Repository from the test to the production area.

Note: Relational database customers must also run Build/Rebuild Control File Relational Tables (POPF01).

2. Copy FILE02

Copy the Employee Database from the test to the production area.

3. Copy P20IN

Run the PAYXTR ALL job in the test environment, then copy the P20IN (FILE12) to the production environment.

4. Run PAYMRG 171

Run the PAYMRG 171 job in the production environment.

5. Copy the Client Data File

Copy the Client Data File (versions 4.5 and 4.0 FILECL32, version 3 FILECL) from the test to the production area for all workstations.

Note: This can be accomplished by changing the configuration to point to the directory containing the Client Data File.

See also:

- Preparation for migration to production ***(on page 191)***

To assist you in preparing to move the data files.

Preparing for migration verification

To prepare for verifying the migration, follow these steps:

1. Set the Production Version switch (optional)

If applicable, set the Production Version switch to ON. You do this on the System Options form.

☞ *Refer to* **Security Considerations** *(on page 97) for more information on the production version switch.*

2. Set the companies for an off-cycle pay run

An off-cycle pay run will produce all payroll reports, just as in a standard pay run, but will not pay employees as long as time entry documents have not been previously entered.

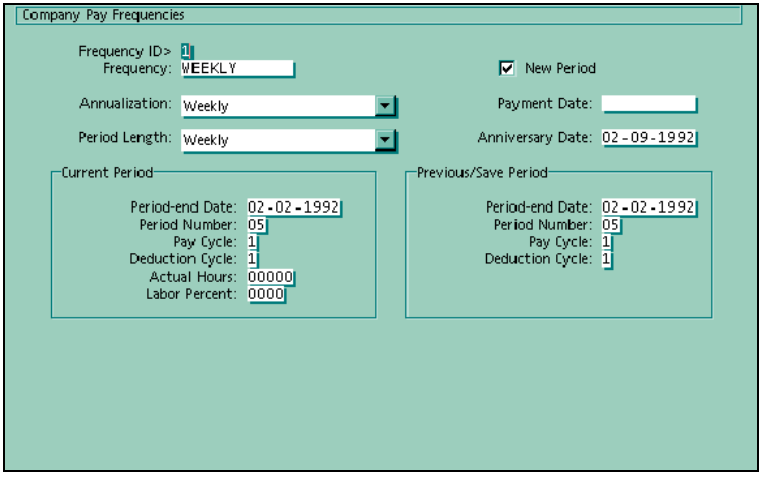
3. Check pay period dates

To check the pay period dates, you use the Company Pay Frequencies (AJ-SCR) form.

Access this form by selecting:

Component:: Payroll Setup Processing
Process: Organization Setup
Task: Pay Frequencies

The Company Pay Frequencies form is displayed:



See also:

- Production environment follow-up ***(on page 194)***

To learn why you need to update the Client Data File and why you might want to change the setting of the Production Version switch.

Verifying the migration

Once you have moved the files and programs to a production environment, verify the migration by completing these steps:

☞ *For details on executing these steps, refer to the Payroll Reports and Balancing manual.*

1. Run the ISWAS Audit Trail report

Verify any changes to the online system.

2. Run a pay extract (PAYXTR)

3. Execute an off-cycle pay run

This must include a maintenance run.

4. Run a pay merge (PAYMRG)

5. Verify report balances

Compare the balances on the generated reports to those from the last parallel pay run performed in test.

See also:

- The audit trail reports ***(on page 193)***

To learn what to verify in the online system.

Review of Questions Answered

1. What does the preparation for migration to production consist of?

2. What data needs to be moved to the new production environment?

3. What utilities and reports are available to assist you in the migration?

4. What are the post-migration follow-up issues and tasks?

5. What are the relational database issues to be addressed?

6. What issues need to be addressed by HR-only customers?

PART 4

Maintaining the Production System

In This Section

CHAPTER 9

Identifying Problems and Applying Temporary Fixes

In This Chapter

Introduction

This section addresses important topics for maintaining The Solution Series.

Tasks

You must complete the following tasks to maintain The Solution Series:

- Apply a COBOL temporary fix to CBSVx
- Apply a Cyborg Scripting Language temporary fix
- Apply a COBOL temporary fix to the payroll programs
- Apply a Report Generator fix
- Apply a FormBuilder fix

Questions answered in this section

This section answers the following questions:

1. What procedures are used to identify problems and notify Cyborg?
2. What types of temporary fixes are distributed?
3. How are temporary fixes distributed?
4. What are override files?

Problem identification and notification

When you identify a situation in which the system does not work as documented, you should communicate this to Cyborg by completing a Problem Notification (PN) form (these forms are supplied to customers by account managers and installation specialists), and submitting it to National Product Support (NPS).

NPS reviews the problem, then submits the PN to the Problem Notification Coordinator at Cyborg.

For tracking purposes, each PN is assigned a unique number. A technician will work with you on resolving the problem.

If it is determined that a coding change is required, a program temporary fix (PTF) will be developed and distributed.

What is a Service Pack?

A Service Pack is the means by which updates to The Solution Series are distributed.

Service Packs keep the product current and extend and update the functionality of your installation of The Solution Series.

They can include updates, program fixes, and additional components. All are conveniently bundled for easy installation.

Service Packs are cumulative—each new Service Pack contains all the fixes in previous Service Packs, as well as any new fixes.

The numbering system used for Cyborg product releases is as follows: Version x.y.z (for example, version 4.5.1).

The following table explains the variables:

Variable	Descriptor	Description
x	Version number	Version number changes indicate a major release that offers significant new functionality and/or technological advances.
y	Release number	A product release also includes new functionality, but without significant technology or database changes.
z	Service Pack number	A Service Pack is essentially a packaging of Program Temporary Fixes (PTF's) issued between releases.

Note: Service Pack 4.5.1 was an exception to the typical Service Pack as it contained significant new functionality.

Program temporary fixes

Program temporary fixes (PTFs) are resolutions to PNs. They are fixes applied temporarily until made part of the system by being included in an update bulletin, service pack, or upgrade.

Note: Temporary fixes have only been unit tested. They have not been system tested.

How temporary fixes are distributed

Temporary fixes are distributed on the Cyborg bulletin board. You should have received instructions for using the Cyborg bulletin board as part of the installation process.

Note: If you do not have these instructions, please contact Cyborg Systems.

☞ *See* **Accessing PTFs on the Cyborg Users Bulletin Board (CUBBS** *(see "Accessing PTFs on the Cyborg Users Bulletin Board (CUBBS)" on page 587)) for additional information on obtaining PTFs.*

Types of temporary fixes

Temporary fixes fall into the following categories:

- COBOL fixes to the CBSVx programs
- Cyborg Scripting Language fixes to English Language (CSL) programs
- FormBuilder changes
- COBOL fixes to the payroll programs
- Report Generator fixes to the Report Generator programs
- New versions of the GUI executable

How temporary fixes are identified

Each temporary fix is assigned a unique 7-position identifier. The identifier can be interpreted as follows:

Position(s)	Identifies	Notes
1–2	Area to which the fix applies: PB = Payroll ST = Solution Series PA = Position Administration	PB fixes can be COBOL or Report Generator Solution Series fixes can be COBOL or Cyborg Scripting Language PM changes can be COBOL or Cyborg Scripting Language

Position(s)	Identifies	Notes
3–4	Release level	30 = */ST*30 and PUB 37.0 40 = */ST*40 45 = */ST*45 and PUB 38.0
5–7	Sequential number	

For example, the temporary fix ST45003 represents a temporary fix to The Solution Series programs for release 4.5. It is the third fix for the 4.5 release.

Application of temporary fixes

The type of temporary fix determines how it will be applied to the system.

The following discussion provides the background information you will need to apply temporary fixes.

COBOL temporary fixes for CBSVx programs

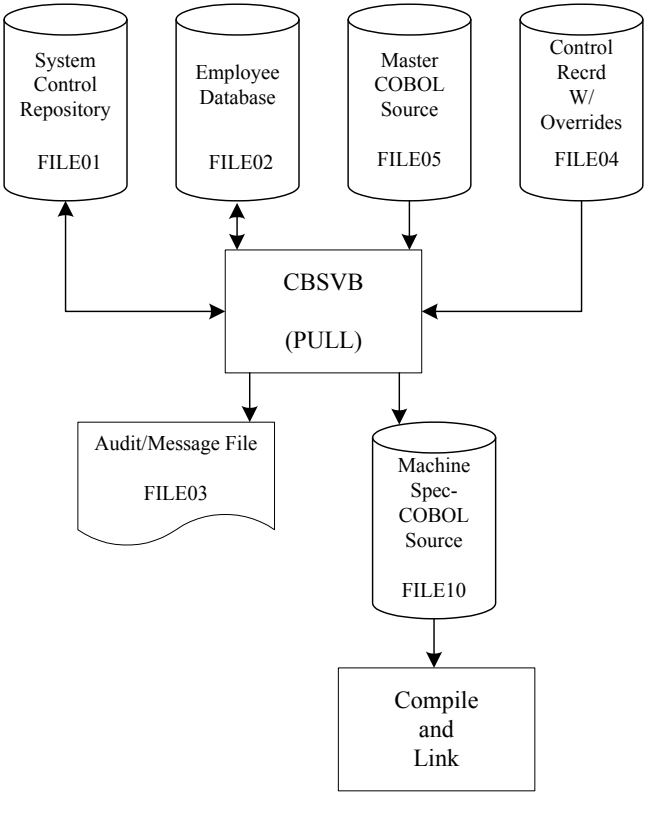
Master source for the CBSVx programs is stored on the CBSV installation file.

Extracted CBSVx programs are maintained by applying COBOL temporary fixes.

These temporary fixes must first be copied to an override file. The overrides are then used as input to the PULL (extraction) process.

Overrides do not affect the master source; they are only reflected in the extracted source.

The following figure shows the flow of the extraction process and the application of the COBOL overrides:



The override file

You should create an override file to contain fixes to be applied to the CBSVx programs.

You should have only one override for the CBSVx programs, not one for each version (CBSVB, CBSVO, and so forth).

Following are the requirements for records in a COBOL override file:

- Records must be kept in COBOL sequence number order.
- Column 1 must contain one of the following action codes:
  B—Insert (add) the record to the extracted source
  C—Change (replace) the record in the extracted source
  D—Do not extract the record from the master source
- The COBOL sequence number must start in column 2.

Following is an example of a COBOL PTF and the override file for the CBSVO program. Due to space constraints, only part of the actual data portion of the override file is shown:

```
KEYWORDS: IDMS
CORR: ST30003   DATE: 01 AUG 96   PN: 54558,54560,  VERS: 3.0
                                        54562, 54565
PLATFORM(S): IBM                  CODED BY: Bill Guest
        PROGRAM MODULE/NAME: CBSV
BBS DESCRIPTION: IDMS required corrections.
SYMPTOM DESCRIPTION: CBSVO compile errors, CBSVB PAYMRG fails.
TECHNICAL DESCRIPTION: CBSVO: IDMS controls missing, files 30 and 31
not defineD, COMM-U not defined, EXEC invalid.
CBSVB: PAYMRG 171 failed with SC07095R FILE07 open error.  Actual cause
was files 24 and 25 at 512 bytes instead of 3060.
RESOLUTION DESCRIPTION: All code changes were resolved during the install.
CBSVO compile failed because new files that were added to the system were
not being bypassed for IDMS online.
PAYMRG failed because the default record size for files 24 and 25 were
changed.  The IDMS paymrg process requires these to be the full 3060 bytes.
ROOT CAUSE: Non available test site.
TEST DESCRIPTION:  Tested at client site.
CONFIRMATION: Resolved at install.
FURTHER ACTION REQUIRED: These will be included in the next release.
STATUS: PN response, PTF, Bulletin Board.
SUPERSEDES:  None.
ACTION: Apply change file ST30003.
FILES TO EXPECT FROM DOWNLOAD:  ST30003.DOC, ST30003.DAT
         1         2         3         4         5         6         7         8
12345678901234567890123456789012345678901234567890123456789012345678901234567890
                                    .
                                    .
                                    .
B042750/B/ 01  FILE24-RECORD.                                          5003
B042760/B/  05  FILLER                 PIC X(512).                     5003
B042770/B/+N   05  FILLER                 PIC X(2548).                 5003
B042771/B/+I   05  FILLER                 PIC X(2548).                 5003
C043000/C/ 01  FILE25-RECORD.                                          5003
B043010/C/  05  FILLER                 PIC X(512).                     5003
B043020/C/+N   05  FILLER                 PIC X(2548).                 5003
```

```
B043021/C/+I   05  FILLER                PIC X(2548).                    5003
B050951+N   05  COMM-U                  PIC X     VALUE '_'.            5003
                                    .
                                    .
C699100-C   EXEC CICS SYNCPOINT END-EXEC.                                5003
```

Below is the override file:

```
P PULL T00100   999999PULL  5MCBSVO. VAX        4
                                    .
                                    .
                                    .
B042750/B/ 01  FILE24-RECORD.                                            5003
B042760/B/  05  FILLER                PIC X(512).                        5003
B042770/B/+N   05  FILLER                PIC X(2548).                    5003
B042771/B/+I   05  FILLER                PIC X(2548).                    5003
C043000/C/ 01  FILE25-RECORD.                                            5003
B043010/C/  05  FILLER                PIC X(512).                        5003
B043020/C/+N   05  FILLER                PIC X(2548).                    5003
B043021/C/+I   05  FILLER                PIC X(2548).                    5003
B050951+N   05  COMM-U                  PIC X     VALUE '_'.            5003
                                    .
                                    .
                                    .
C699100-C   EXEC CICS SYNCPOINT END-EXEC.                                5003
```

Cyborg Scripting Language temporary fixes

Cyborg Scripting Language programs are maintained by applying CSL temporary fixes.

Once obtained from the bulletin board, the temporary changes file (FILE05) will be used as input to the Maintenance In (MAINTI) utility to update the CSL source contained in the System Control Repository.

The temporary fix file

You should create a temporary fix file to contain any CSL source code changes obtained from the bulletin board.

Following are the requirements for records in the temporary fix file:

- Each record must be in control record format, with the correct key structure for each entry.
- Position 80 must contain one of the following action codes:
  Blank—Insert (add) the record
  A—Insert (add) the record
  C—Change (replace) the record
  D—Delete the record

Following is an example of a the documentation file and temporary fix file for a Cyborg Scripting Language program.

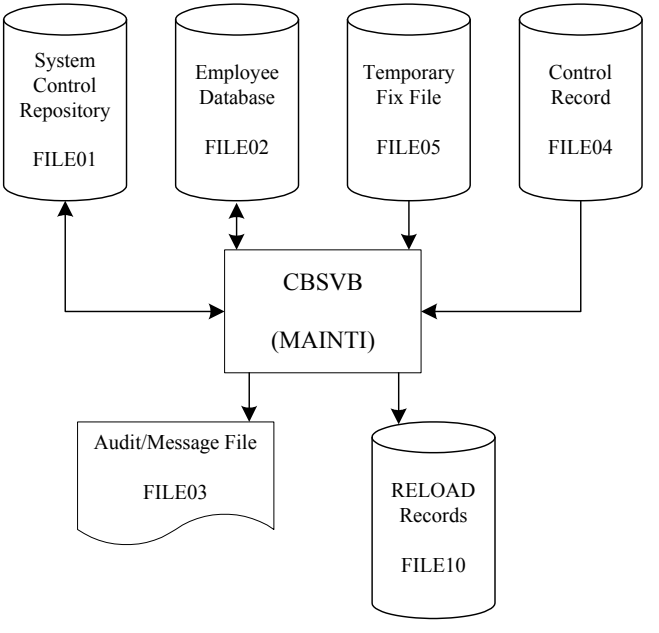
```
KEYWORDS: ENCODE, LOOKUP, NAME, PHONET, PN98232
```

```
 CORR: STG4229      DATE: 24 JUN 99      PN: 98232        VERS: /ST4.0
PLATFORM(S): ALL                  CODED BY: David Hanson/Hicklin
PROGRAM MODULE/NAME: SC/LOOKUP
BBS DESCRIPTION: Keying in a short name generates a NOT FOUND in LOOKUP.
SYMPTOM DESCRIPTION: When keying in an abbreviated name, LOOKUP assumes that a 10
character name is          entered causing a NOT FOUND in certain situations.
TECHNICAL DESCRIPTION: When keying in an abbreviated name, LOOKUP assumes that a
10 character name is       entered causing a NOT FOUND in certain situations.
RESOLUTION DESCRIPTION: Created a proper key length before read against the
phonetic entry records.
ROOT CAUSE: Project Code Cutoff-PTF.
TEST DESCRIPTION: 1. Added an employee with the name KENMASOYU-DAVIS, CHRISTINE.
                  2. Entered "EF-SCR" in the screen field and KEN in the key
                     field. A "NAME NOT FOUND" message was returned.
                  3. Applied the code fix.
                  4. Reran step 2 above and the name was returned. Tried
                     different scenarios with other names and either the EF-SCR
                     was returned or the Name List Box was returned properly.
CONFIRMATION: Confirmed via internal testing.
FURTHER ACTION REQUIRED: None.
STATUS: PN response, PTF, Bulletin Board.
SUPERSEDES: None.
ACTION: Apply change file STG4229, RELOAD per MAINTI10 output.
FILES TO EXPECT FROM DOWNLOAD: STG4229.DOC (This file)
                               STG4229.DAT (EL fix)
```

Below is the Cyborg Scripting Language temporary fix file:

```
 @ PTF STG4229
P LOOKUP 00001 @LAST MODIFIED ON:  06-24-99  BY:  DKH   AUTHOR:  SKIP      4229C
P LOOKUP 00490   MOVE 'QPE' TO W7-03-010. MOVE W6-08-102 TO W7-08-013.     4229A
P LOOKUP 00492   IF W7-02-008 EQUAL '10'                                   4229A
P LOOKUP 00494     IF W7-05-015 EQUAL '00000'                              4229A
P LOOKUP 00496       MOVE '05' TO W7-02-008                                4229A
P LOOKUP 00498     ELSE IF W7-04-016 EQUAL '0000'                          4229A
P LOOKUP 00500       MOVE '06' TO W7-02-008                                4229C
P LOOKUP 00502     ELSE IF W7-03-017 EQUAL '000'                           4229A
P LOOKUP 00504       MOVE '07' TO W7-02-008                                4229A
P LOOKUP 00505     ELSE IF W7-02-018 EQUAL '00'                            4229C
P LOOKUP 00506       MOVE '08' TO W7-02-008                                4229A
P LOOKUP 00507     ELSE IF W7-01-019 EQUAL '0'                             4229A
P LOOKUP 00508       MOVE '09' TO W7-02-008.                               4229A
P LOOKUP 00509   MOVE ' ' TO W7-01-021. @TCD@ For ST 40                    4229A
P LOOKUPH42290 PTF STG4229 -- 24 JUN 99 -- PN98232                         4229A
@ END OF PTF STG4229
```

The following figure shows the flow of the maintenance process and the application of the English Language temporary fixes.



FormBuilder programs are maintained by updating The Solution Series Form Appearance Tables (SAT files).

Once obtained from the bulletin board, the temporary fixes CSL changes file must be copied to a temporary changes file. This temporary changes file (FILE05) will be used as input to the Maintenance In (MAINTI) utility to update the Cyborg Scripting Language source contained in the System Control Repository.

The PUTSAT program updates the The Solution Series Form Appearance Table file, runs the GENER8 program to create the form appearance logic, and runs the RELOAD program to compile the form code. The SAT changes file is used as FILE05 input to the PUTSAT process.

CYBMST program changes

The master source for the COBOL payroll programs is stored in the following members of CYBMST:

This member	Contains the source for
C.P0PRGM	P2EDIT P4CALC O4CALC
C.P5PRNT	P5PRNT

This member	Contains the source for
C.P5W2PR	P5W2PR
C.P9CNVT	P9CNVT

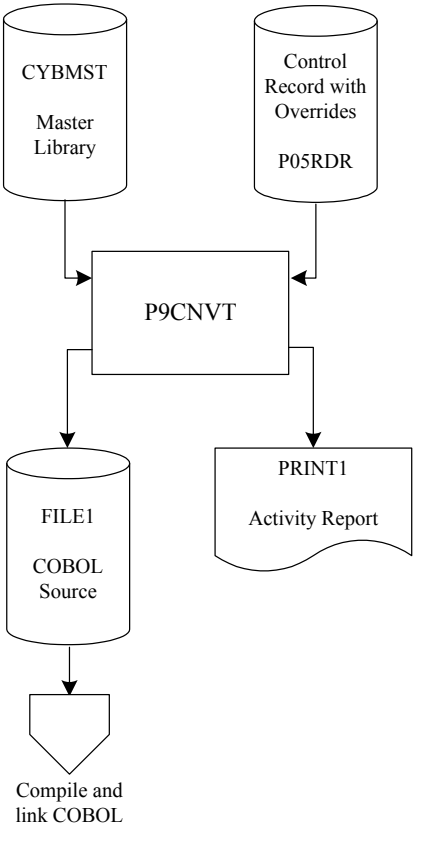
In addition, there are also subroutines stored as various members.

The extracted COBOL source used as input to the compile is stored in FILE1. The extract source programs are maintained by applying COBOL temporary fixes.

The temporary fixes must first be copied to an override file. The overrides are then used as input to the P9CNVT extraction program.

Overrides do not affect the master source on CYBMST; they are only reflected in the extracted source (FILE1).

The following figure shows the flow of the extraction process, and the application of the COBOL overrides:



The override file

You should create an override file (P05RDR file) to contain fixes to be applied to the payroll COBOL programs (for example, P4CALC).

The P05RDR file is referred to as the Reader File.

You may have only one override file for the payroll COBOL programs. Overrides to P2EDIT, P4CALC, O4CALC, and so forth must be combined.

Following is an example of a COBOL PTF and override file for the P2EDIT payroll program. Notice that the override lines of COBOL code follow the control records.

```
KEYWORDS: O4CALC, P4CALC, PAY-CP, 5G9Y
CORR: PB37065    DATE: 06 MAR 97   PN: 61393     PUB: 37.00
PLATFORM(S): ALL                 CODED BY: Robert Smithers
PROGRAM MODULE/NAME: O4CALC, P4CALC
BBS DESCRIPTION: Auto setup of HED at employee level does not work properly.
SYMPTOM DESCRIPTION:
Method Code 9Y does not calculate if HED does not exist at the employee level.
Once setup at the employee level it works fine.
TECHNICAL DESCRIPTION:
When a new HED is being set up automatically through O4/P4Calc and the Auto
Setup is set to default to the company (X), the defaults from the company are
not being copied to the employee HED.
O4/P4Calc was setting the employee level 131-HED-Frequency to '17' to identify
using Company Defaults as the HED was being set up, but checking for a '21'
(time card method code at the Company level), thereby bypassing moving in the
default values.
RESOLUTION DESCRIPTION:
Modified the IF statement to check for a frequency of '17' as well as '21'.
ROOT CAUSE: Insufficient Unit Testing.
TEST DESCRIPTION:
Customer ran without the fix and 9Y did not calculate properly.  Recompiled
with the overrides, reran and confirmed the calculations were correct.
CONFIRMATION:
Confirmed via customer testing.
FURTHER ACTION REQUIRED: None.
STATUS: PN response, PTF, Bulletin Board.
FILES TO EXPECT FROM DOWNLOAD: PB37065.DOC, PB37065.DAT.
ACTION: Add to overrides for C.P0PRGM,  and re-extract and compile P4CALC and
O4CALC.
         1         2         3         4         5         6         7         8
12345678901234567890123456789012345678901234567890123456789012345678901234567890
@ PTF PB37065
4P 585320     IF 131-HED-FREQUENCY OF HOLD1 NOT = '21'                      6065
4P 585321       IF 131-HED-FREQUENCY OF HOLD1 NOT = '17'                    6065
4P 585322         OR (060-DEFAULT-FREQ OF HOLD1 NOT = '21')                 6065
4P 585323          GO TO 2504-HOURS.                                        6065
@ END OF PTF PB37065
```

```
         1         2         3         4         5         6         7         8
12345678901234567890123456789012345678901234567890123456789012345678901234567890
O4CALC      OP           24C     IBM-370.
   ** C.P0PRGM
4P 585320     IF 131-HED-FREQUENCY OF HOLD1 NOT = '21'                      6065
4P 585321       IF 131-HED-FREQUENCY OF HOLD1 NOT = '17'                    6065
```

```
4P 585322          OR (060-DEFAULT-FREQ OF HOLD1 NOT = '21')                6065
4P 585323           GO TO 2504-HOURS.                                       6065
   999999
```

Report Generator temporary fixes

The master source for the Report Generator programs is stored as members on CYBMST.

Each generator is composed of two members, a sort and a format.

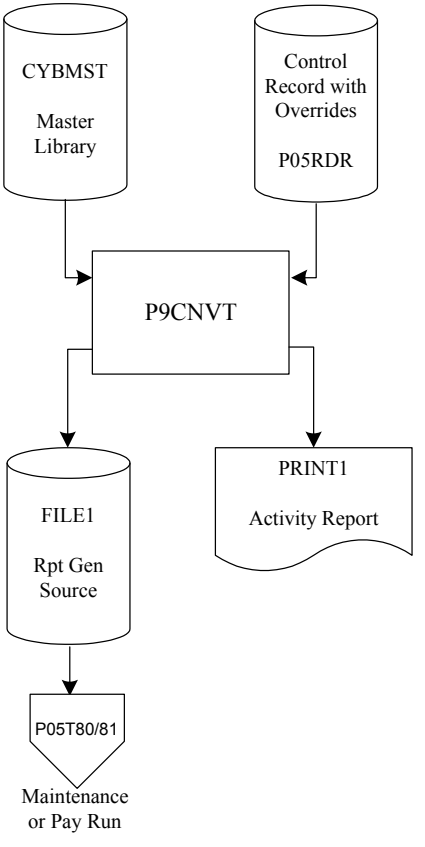
Extracted source used as input to the payroll process is stored first in FILE1. After being input to a maintenance or pay run, the executable code is stored only on the P20 Batch Master file.

The extracted source programs are maintained by applying overrides using the P9CNVT extraction program.

Overrides do not affect the CYBMST Report Generator source members; they are only reflected in the extracted source.

☞ *Refer to the Payroll Technical manual for more information on CYBMST, including system and report generators.*

The following figure shows the flow of the extraction process and the application of the Report Generator overrides:



The override file

You should create a Report Generator override file to contain changes to generator programs—system generator and report generator.

You should have only one override file that will be input as P05RDR file.

Following are the requirements for records in the Report Generator override file:

- Records must be in order by report generator name, as stored in CYBMST.
- Records for each report generator must be kept in sequence number order.

Following is an example of a Report Generator override file. Notice that the override lines of Report Generator code follow the control records.

```
KEYWORDS: RG 0101
CORR: PB37020  DATE: 15 AUG 96   PN: 55254    VERS: 37.00
PLATFORM(S): ALL                  CODED BY: Bill Guest
PROGRAM MODULE/NAME: RG 0101
BBS DESCRIPTION: Common tax company, employer FICA or default tax errors.
```

```
SYMPTOM DESCRIPTION:
 When a common tax company is used, employer FICA may be in error or
 the default taxation rate may be in error.
TECHNICAL DESCRIPTION:
 In PUB37, a change was made to allow the entry of the default taxation
 rate in a WLFDTX transaction.  This capability matched the documentation
 of the WLFDTX transaction.  However, the usage of the WLFDTX transaction
 had changed to allow additional positions of the tax identification
 number in the area formerly reserved for the default tax rate.  This
 can cause the last two digits of the employer identification number
 to be applied as the default taxation rate or the employer FICA rate.
RESOLUTION DESCRIPTION:
 The ability to override a default taxation rate in the WLFDTX transaction
 has been removed.
ROOT CAUSE:  Incomplete research and design.
TEST DESCRIPTION:
 Extracted report generator 0101, loaded and tested.  Field 242 was not
 updated from the WLFDTX transaction.
CONFIRMATION: Internal testing.
FURTHER ACTION REQUIRED:  None.
STATUS: PN Response, PTF, Bulletin Board.
SUPERSEDES:  N/A
FILES TO EXPECT FROM DOWNLOAD: PB37020.DOC, PB37020.DAT.
ACTION:
 Use the following overrides to extract report generator 0101 and reload
 it on a maintenance run.
@ PTF PB37020
         1         2         3         4         5         6         7         8
12345678901234567890123456789012345678901234567890123456789012345678901234567890
   ** T.ZZBATCH
   999999
   ** R.SRT01
   999999
   ** R.RPT01
   R701930FLD243R;LIT01G;FLD347;MTO
    DELETE 000935-000940
   999999
@ END OF PTF PB37020
         1         2         3         4         5         6         7         8
12345678901234567890123456789012345678901234567890123456789012345678901234567890
RPT GEN PTF mach parm            source computer
   ** T.ZZBATCH
   999999
   ** R.SRT01
   999999
   ** R.RPT01
   R701930FLD243R;LIT01G;FLD347;MTO
    DELETE 000935-000940
   999999
```

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Applying a COBOL temporary fix to CBSVx

To apply a COBOL temporary fix to the CBSVx programs, follow these steps:

1. Update the COBOL override file

Copy the COBOL overrides from the temporary fix into the Control Record File (FILE04) or existing override file in COBOL sequence.

The override COBOL code must follow the PULL control record.

2. Extract the COBOL source

To extract the COBOL source, you run the PULL program, using the override file as input.

Only one program can be extracted in each execution of CBSVB.

You execute CBSVB in batch as follows:

INPUT	FILE01 FILE02 FILE04 FILE05	System Control Repository Employee Database Control Record File with overrides CBSV File
OUTPUT	FILE03 FILE10	Audit/Message File Machine-specific COBOL source
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	PULL	program name
29–30	5M	

In these positions	Enter	Description
31–37	CBSVO. CBSVOT. CBSVB. CBSVBT.	Name of the program to extract. You must have the period after the program name.
38–40	Op. sys. Code	See Operating System Codes
41–47	Additional key	Optional. A COBOL Program-ID to override the ID. It must end in a period.
49	1–7 (depending on file choices)	Optional. 1 = FILE23. 2 = FILE24. 4 = FILE25. You can add these codes together to indicate various file combinations. For example, 3 = FILE23 and FILE24.

3. Compile and link the COBOL source

Use the existing compile job from CYBMST to compile and link the COBOL source.

See also:

- Application of temporary fixes ***(on page 211)***

To learn background information necessary to apply COBOL temporary fixes

Applying a Cyborg Scripting Language temporary fix

Every CSL fix comes with a .doc file which you must read to ensure correct installation of the PTF (fix).

To apply a CSL temporary fix to the System Control Repository, follow these steps:

1. Acquire the temporary fix file

Copy the Cyborg Scripting Language fixes from the temporary fix (.dat file) to an input file named FILE05.

2. Edit the jmainti job

Change the 'SET FILE05=' line to show the path of the PTF (.dat file from Step 1) you want to load.

For example:

```
call mfsetup.bat
set COBSW=+S5
cd ..\data
ECHO ******************
ECHO JMAINTI IN PROGRESS
```

```
ECHO ******************
SET FILE03=..\list\mainti_ST451_sp.03
SET FILE04=..\data\mainti_ST451_sp.04
SET FILE05=..\temp\w20002.dat
SET FILE10=..\data\RELOAD.10
..\prog\CBSVB
ECHO  JMAINTI COMPLETED
cd ..\runs
```

3. **Save your change**
4. **Run the jmainti job**
5. **Review the output**

   Open the Mainti.03 file. You should see a 'Complete' message.

6. **Run jreload**

   Reload the programs by running the `jreload` batch file.

7. **Check the reload output**

   Open the reload.03 file. You should see a 'Reload is OK' message.

Applying a FormBuilder fix

You apply a FormBuilder temporary fix to the System Control Repository. To do so, follow these steps:

1. **Apply any CSL program changes**

   Apply any CSL program changes as in 'Applying a Cyborg Scripting Language temporary fix', Steps 1-5.

2. **Update the The Solution Series Form Appearance Table (*.SAT file)**

   Run PUTSAT using the .SAT file provided as FILE05 input.

   The PUTSAT program updates the Form Appearance Table file and runs RELOAD to create the logic by calling the GENER8 subroutine and creating the Cyborg Scripting Language executable code.

   Execute this utility in batch as follows:

INPUT	FILE01 FILE02 FILE04 FILE05	System Control Repository Employee Database Control Record File Form appearance replacement
OUTPUT	FILE03	Audit/Message File
EXECUTE	CBSVB	

   The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23-28	PUTSAT	program name

   Control record example:

```
  1         2         3         4         5
1...5....0....5....0....5....0....5....0....5....0....5....0....5
                      PUTSAT
```

3. Check form appearance

Launch the form in The Solution Series and review the layout to make sure it is acceptable.

See also:

- Application of temporary fixes ***(on page 211)***

To learn background information necessary to apply FormBuilder temporary fixes.

Applying a COBOL temporary fix to the payroll programs

To apply a COBOL temporary fix to the payroll programs (P2EDIT, P4CALC, P5PRNT, P9CNVT, and O4CALC), follow these steps:

1. Update the Payroll Process COBOL override file

Copy the COBOL overrides from the temporary fix into the appropriate existing COBOL override file (P05RDR) in sequential order.

Overrides to P2EDIT, P4CALC, O4CALC and so forth should all be in the same override file.

The override COBOL code must follow the Machine Parameter record.

2. Extract the COBOL source

To extract the COBOL source from CYBMST, run the P9CNVT program, using the override file as input.

You can extract only one COBOL program for each execution of P9CNVT.

You execute P9CNVT as follows:

INPUT	CYBMST P05RDR	Cyborg Master Library Reader File
OUTPUT	PRINT1 FILE1	Audit/Message File COBOL source
EXECUTE	P9CNVT	

The Machine Parameter Record on P05RDR has the following syntax:

In these positions	Enter	Description
1–12		Comments
13–25	machine parameters	Codes identifying the computer, operating system, and compiler
26–28	program indicator	2=P2EDIT 4=P4CALC 5=P5PRNT 24=O4CALC

In these positions	Enter	Description
34–80	source computer	Name of the source computer

Note: The beginning of the P9CNVT program shows comments containing Machine Parameter Records for all machines. Refer to the comments for your platform.

3. Compile and link the COBOL source

Use the existing compile job from CYBMST to compile and link the COBOL source.

See also:

- Application of temporary fixes ***(on page 211)***

To learn background information necessary to apply COBOL temporary fixes.

Applying a Report Generator temporary fix

To apply a Report Generator temporary fix, follow these steps:

1. Update the Report Generator override file

Copy the Report Generator from the temporary fix into the existing Report Generator override file (P05RDR).

The override code must follow the control record.

2. Extract the Report Generator source

To extract the Report Generator sort and format source from CYBMST, run the P9CNVT program, using the override file as input.

You must always extract the sort and format members together. The sort member always precedes the format member.

You can extract multiple report generators in a single execution of P9CNVT.

The output file, FILE1, contains the report generator code in de-compressed format for use in the next pay or maintenance run.

You execute P9CNVT as follows:

INPUT	CYBMST P05RDR	Cyborg Master Library Reader File
OUTPUT	PRINT1 FILE1	Activity Report Report Generator source
EXECUTE	P9CNVT	

The machine parameter record on P05RDR has the following syntax:

In these positions	Enter	Description
1–12		Comments.

In these positions	Enter	Description
13–25	machine parameters	Codes identifying the computer, operating system, and compiler.
26–28	spaces	
34–80	source computer	Name of the source computer.

The member selection record on P05RDR has the following syntax:

In these positions	Enter	Description
1–3	spaces	
4–5	**	
6	space	
7	R	report generator
8	.	Period
9-75	SRTxx RPTxx	source portion format portion
76–80	spaces	

Following each member selection record, you must include a delineator or trailer record.

It has the following syntax:

In these positions	Enter
1–3	spaces
4–9	999999
10–80	spaces

Following is an example of a P05RDR for a sample extraction.

This P05RDR file would direct the P9CNVT program to extract T.ZZBATCH, followed by report generators 0202 and 5H5Z.

The T.ZZBATCH member contains the batch transaction necessary for the processing of report generator input by the P2EDIT program.

```
          1         2         3         4         5         6         7         8
12345678901234567890123456789012345678901234567890123456789012345678901234567890
RPT GEN PTF mach parm            source computer
   ** T.ZZBATCH
   999999
   ** R.SRT02
   999999
   ** R.RPT02
   999999
   ** R.SRT5H
   999999
   ** R.RPT5Z
   999999
```

Note: If you are processing more than one member in a single extract job, members must appear in the P05RDR file in the same sequence in which they exist on CYBMST.

The following example shows what the P05RDR file would look like with an override to R.RPT02 for an AS400 machine:

```
        1         2         3         4         5         6         7         8
12345678901234567890123456789012345678901234567890123456789012345678901234567890
RPT GEN PTF MI54PEC             AS400
   ** T.ZZBATCH
   999999
   ** R.SRT02
   999999
   ** R.RPT02
   R702070*     THIS IS A TEST COMMENT.
   999999
   ** R.SRT5H
   999999
   ** R.RPT5Z
   999999
```

3. Update the P20 Batch Master File

The next pay or maintenance run will use the output from Step 2, FILE1, to update the P20 Batch Master File with the modified report generators.

See also:

- Application of temporary fixes ***(on page 211)***

To learn background information necessary to apply Report Generator temporary fixes.

Review of Questions answered

1. What procedures are used to identify problems and notify Cyborg?

2. What types of temporary fixes are distributed?

3. How are temporary fixes distributed?

4. What are override files?

CHAPTER 10

Maintaining Cross-Reference Keys

In This Chapter

Introduction

In this section you will become familiar with maintaining cross-references within The Solution Series system.

Keys provide direct QUERY access to your data within The Solution Series database. The Solution Series provides three types of keys—QUERY Primary Keys, QUERY Alternate Keys, and Phonetic Keys.

The QUERY Primary Keys require no maintenance and are immediately available to you.

QUERY Alternate Keys need to be maintained on a regular basis.

The maintenance of Phonetic Keys depends on how you have entered your employee data.

Tasks

You must complete the following tasks to maintain your cross-reference data:

- Maintain QUERY Alternate Keys
- Maintain Phonetic and Employee ID Keys

Questions answered in this section

This section answers the following questions:

1. What is a QUERY Primary Key?
2. What is an QUERY Alternate Key?
3. What is a Phonetic Key?
4. What is an Employee ID Key?
5. How do you delete and rebuild QUERY Alternate Keys?
6. How do you delete and rebuild Phonetic and Employee ID Keys?
7. What are the pre-defined QUERY Alternate Keys?
8. What is Cyborg's recommendation for maintenance of both the QUERY Alternate Keys and Phonetic Keys?

QUERY Primary Keys

QUERY Primary Keys are used to direct your Query program to the type of record you will be processing, such as employee data or audit record data.

The QUERY Primary Keys are:

- 00—Employee Number
- HL—History/Labor
- MN—Documentation
- P—Program Name
- TX—Tax Records

Recommended maintenance

The QUERY Primary Keys require no maintenance and are immediately available to you.

QUERY Alternate Keys

QUERY Alternate Keys is a term used by The Solution Series to access the employee master record in an order other than by primary key.

These fields are index pointers created using the Master Record Key and other field information. The QUERY program uses them to search and sort records when a query is executed.

The system reads the QUERY Alternate Key record from the System Control Repository and then reads the employee record from the Employee Database using the Organization Control Number, record type, and Employee Number from the QUERY Alternate Key record.

The QUERY Alternate Keys are stored in the System Control Repository as Q records that can be viewed using EDIT.

The QUERY Alternate Keys pre-defined by The Solution Series are:

- 01—Social Security Number
- 02—Employee Name

The Solution Series provides the following utility programs for the maintenance of your QUERY Alternate Key:

- KEYDEL—QUERY Alternate Key Delete
- KEY-00—QUERY Alternate Key Rebuild

KEYDEL Utility Program

The QUERY Alternate Key Delete (KEYDEL) utility program deletes QUERY Alternate Key records from the System Control Repository by QUERY Alternate Key type (depending on the security authorization of the user).

When you run the KEYDEL utility program, control records for each QUERY Alternate Key type must be added. Each key type control record must use the appropriate values in the FROM and TO fields.

KEY-00 Utility Program

The QUERY Alternate Key Build (KEY-00) utility program is used to create QUERY Alternate Keys.

This program must be re-executed on a regular basis to create QUERY Alternate Keys for the new employee records added to the file.

The KEY-00 program, as delivered, creates QUERY Alternate Key records to access employee records by Social Security number and Name (last name, first name).

The program may also create QUERY Alternate Keys that allow you access to other records, such as time entries, adjustment transactions (audit records), or Cyborg Scripting Language program records (if customized).

Recommended maintenance

You should set up a schedule for maintaining the QUERY Alternate Keys.

As new Master Records are being added or employees are transferred between organizations, the QUERY Alternate Key records are not updated. Therefore, QUERY Alternate Key records must be periodically purged and rebuilt using the KEYDEL and KEY-00 programs.

Because you are dealing with a large number of records it is also recommended that you execute these programs in batch mode using a Query Control Record in your job stream.

If you only have a few new lines, you can run KEY-00 online for each new employee.

☞ *Refer to the Online Cyborg Scripting Language/English Language Programming guide for information on building additional alternate keys.*

Phonetic Keys

Phonetic Keys allow you to access your employee data by using the phonetic spelling of the employee's last name.

Phonetic Key records are stored in the System Control Repository as QPE records and are used by the Phonetic Name Search (PHONET) and Name Search (LOOKUP) programs.

When you execute these programs, they translate the phonetic spelling of the employee's name into a numeric key.

Using that numeric key the programs read the Phonetic Key records from the System Control Repository. Then they read the Employee Record from the Employee Database using the Organization Control Number, record type, and employee number.

The displayed results are either the Employee Number from the Phonetic Key record or a list of all employee names and numbers that match the phonetic spelling you entered.

Phonetic Keys are not used to execute queries.

The Solution Series provides the following utility programs for the maintenance of your Phonetic Keys:

- Phonetic Key Delete (DEL-PE)
- Build Phonetic Keys (KEY-PE)

If you add employee records using The Solution Series online or via batch formatted forms, the Phonetic Keys are automatically produced.

If you add employee records using batch transactions through the P4CALC program your online system will not contain the Phonetic Keys needed to execute the Phonetic Name Search Program (PHONET).

You must periodically rebuild your Phonetic Keys. This is usually done only once after your data is loaded into the Employee Database.

Employee ID Keys

You can also use the Build Phonetic Keys (KEY-PE) program to build Employee ID Keys. These keys allow you to search for employees across organizations. This is a Workflow enablement feature.

DEL-PE Utility Program

Before you rebuild, you must first delete all existing Phonetic Keys using the Phonetic Key Delete (DEL-PE) program.

The DEL-PE utility program is run either online or in batch mode and deletes all Phonetic and Employee ID Key records for all organizations.

KEY-PE Utility Program

After the delete is completed, you need to use the Build Phonetic Key (KEY-PE) QUERY program to create the Phonetic Keys in batch or use the online QUERY facility.

The Control Records for each Organization Control Number value must be added to the KEY-PE job and the KEY of 00 must be used with the appropriate FROM and TO values to include all employees.

The KEY-PE program builds Phonetic and Employee ID Keys for each organization.

Recommended maintenance

The maintenance of the Phonetic Keys depends on how you added employee records to your system:

- If you added the employee records online using The Solution Series, you will not need to run the Phonetic Keys Build (KEY-PE) utility program.

  Phonetic Keys are automatically created and/or updated for employee records added to the Employee Database.

- If you added employee records using batch transactions through the P4CALC program, your online system will not contain the Employee ID Keys (needed to execute the Social Security Number search).

  You must rebuild your Employee Keys. This is usually done only once after your data is loaded to the Employee Database.

Recommended maintenance summary

Cyborg recommends that you set up a schedule for maintaining the QUERY Alternate Keys and for the Phonetic and Employee ID Keys.

The following is an overall maintenance summary:

Keys	Maintenance
Primary Keys	Require no maintenance; are immediately available to you.

Keys	Maintenance
Alternate Keys	Periodically purge records and rebuild using KEYDEL and KEY-00; execute in batch using Query Control Record in job stream.
Phonetic and Employee ID Keys	*For online*—no maintenance; are automatically created and/or updated for employee records added to the Employee Database. *For batch from P4CALC*—rebuild keys after employee records are added to the Employee Database using the DEL-PE and KEY-PE programs.

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Maintaining QUERY Alternate Keys

1. Delete Alternate Key records from the System Control Repository

The KEYDEL program requires a two-line control record.

The control records for each QUERY Alternate Key type and each Organization Control Number value must be added to the KEYDEL job.

Each QUERY control record must have the appropriate FROM and TO values.

The following are the input files, output files, and the program you need to execute KEYDEL.

To execute this utility, you need to run CBSVB as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03	Audit/Message File
EXECUTE	CBSVB	

For QUERY control record line 1:

In These Positions	Enter	Description
23–28	QUERY	
56–61	KEYDEL	
62–63	Key to be deleted	Example: 01,02
64–74	FROM field value (position 1–11)	
75	Continuation character '*'	

WARNING: Do not delete QUERY Alternate Key 00. QUERY Alternate Key 00 is the Primary Key and contains the employee number.

For QUERY control record line 2:

In These Positions	Enter
16–23	FROM field entry (positions 12–19)
26–44	TO field entry

QUERY Control Record Example:

Social Security Number Delete:

```
         1    1    2    2    3    3    4    4    5    5    6    6    7    7    8
....5....0....5....0....5....0....5....0....5....0....5....0....5....0....5....0
P QUERY LINE 1        QUERY                          KEYDEL010          *
P QUERY LINE 2           999999999
```

Employee Name Delete:

```
  1    1    2    2    3    3    4    4    5    5    6    6    7    7   8
....5....0....5....0....5....0....5....0....5....0....5....0....5....0....5...0
P QUERY LINE 1        QUERY                          KEYDEL02A          *
P QUERY LINE 2           ZZZZZZZZZ
```

2. Rebuild Alternate Key record from the System Control Repository

The KEY-00 program requires a two-line control record.

The control records for each Organization Control Number value must be added to the KEY-00 job.

The KEY of 00 must be used with the appropriate FROM and TO values to include all employees.

The following are the input files, output files, and the program you need to execute KEY-00.

To execute this utility, you need to run CBSVB as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03	Audit/Message File
EXECUTE	CBSVB	

For QUERY control record line 1:

In these positions	Enter
17–22	Control 1-2 value
23–28	QUERY
56–61	KEY-00
62–63	00
64–74	FROM Employee Number (positions 1–11)
75	Continuation character '*'

For QUERY control record line 2:

In these positions	Enter
16–23	FROM field entry (positions 12–19)
26–44	TO Employee Number

QUERY control record example:

Rebuild for organization 999999:

```
         1    1    2    2    3    3    4    4    5    5    6    6    7    7   8
....5....0....5....0....5....0....5....0....5....0....5....0....5....0....5....0
P QUERY LINE 1  999999QUERY                          KEY-00000          *
P QUERY LINE 2           999999999
```

Rebuild for organization 995555:

```
         1    1    2    2    3    3    4    4    5    5    6    6    7    7   8
....5....0....5....0....5....0....5....0....5....0....5....0....5....0....5....0
P QUERY LINE 1  995555QUERY                          KEY-00000          *
P QUERY LINE 2           999999999
```

Note: Tis one control record creates all QUERY Alternate Key types coded in your QUERY Alternate Key Build program. You do not have to create each key type separately.

See also:

- QUERY Alternate Keys *(on page 232)*

To learn the various programs used in maintaining Alternate Keys.

Maintaining Phonetic and Employee ID Keys

1. Indicate the type of key to build

You do this on the second panel of the Company Options form.

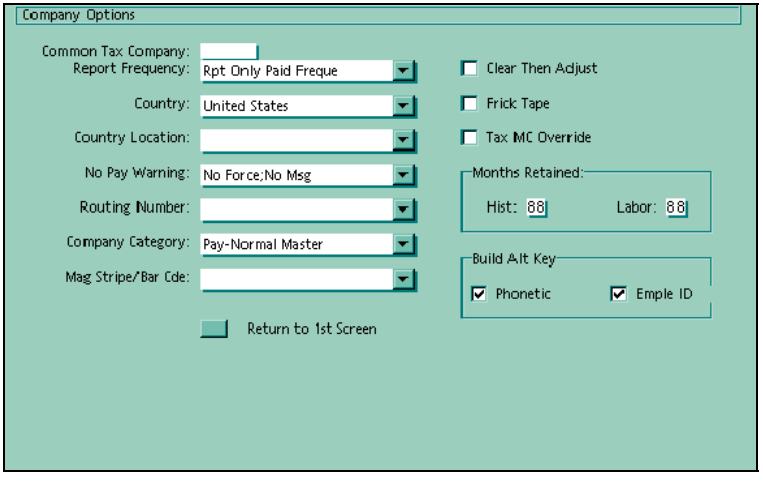
You access this form by selecting:

Component: Payroll Setup Processing
Process: Maintain Organization Payroll Details
Task: Organization Options

and then selecting the 'More Options' button.

2. Select the type of key(s) to build

You can choose Phonetic and/or Employee ID. The indicated keys will be built automatically for new or transferred employees.



3. Save the form

4. Delete Phonetic/Employee ID Keys

The first step in rebuilding the Phonetic and/or Employee ID Keys is to delete them.

Generally, you would do this after loading production data during an upgrade.

To run DEL-PE online do the following:

1. Access the Command Entry dialog box
   To access this dialog box from the menus, select:
   Actions ➤ Enter Command

2. Enter DEL-PE as the **P**rogram name.
3. Click OK or press Enter
   All Phonetic and Employee ID Key records are deleted for all organizations.

   The following **sample** script illustrates how to delete the phonetic keys in batch. In the line that is in bold print in the sample script, notice the 'A' that is required in Column 41.

```
@echo off
call mfsetup.bat
set COBSW=+S5
cd ..\data
ECHO
*****************************************************************************
ECHO JALTKEYS IN PROGRESS - this job deletes and rebuilds alternate index records
ECHO
*****************************************************************************
ECHO
*****************************************************************************
ECHO Step 1:  Delete the Q01, Q02, QID, and QPE alternate index recs on file01
ECHO Step 2:  Rebuild the alternate indexes
```

```
ECHO
*************************************************************************
ECHO P QUERY J00105  01LEAPQUERY                          KEYDEL010          * >
..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  01LEAPQUERY                          KEYDEL02A          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           zzzzzzzzzz                >> ..\work\QUERY.04
ECHO P DEL-PEJ00100  01LEAPDEL-PE           A           >> ..\work\QUERY.04
ECHO P QUERY J00105  01LEAPQUERY                          KEY-00000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  02CRKTQUERY                          KEY-00000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  991111QUERY                          KEY-00000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  993333QUERY                          KEY-00000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  995555QUERY                          KEY-00000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  996666QUERY                          KEY-00000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  999999QUERY                          KEY-00000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  01LEAPQUERY                          KEY-PE000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  02CRKTQUERY                          KEY-PE000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ...04
ECHO P QUERY J00105  991111QUERY                          KEY-PE000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  993333QUERY                          KEY-PE000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  995555QUERY                          KEY-PE000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  996666QUERY                          KEY-PE000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work\QUERY.04
ECHO P QUERY J00105  999999QUERY                          KEY-PE000          *
>> ..\work\QUERY.04
ECHO P QUERY J00106           9999999999                >> ..\work.04
set FILE03=..\list\QUERY.03
set FILE04=..\work\QUERY.04
..\cbsvb
ECHO *
ECHO *************************************************************************
ECHO *
type ..\list\QUERY.03
ECHO *
ECHO *************************************************************************
ECHO *
ECHO JALTKEYS COMPLETED
```

```
cd ..\runs
```

In this example, an 'A' is placed in column 41 of the DEL-PE control card in order for the delete to work in batch. The 'A' in column 41 moves the 'A' to W7-01-246 which causes the bypassing of the print message statement PP030 ('Press Enter to delete QPE records off FILE01).

The DEL-PE program listing is shown below for informational purposes.

```
00000  SECURITY 'PP'. @ Delete Phonetic Key for All C 1-2S       OPP
00001  @LAST MODIFIED ON:  01-11-96  BY:  OLEG  AUTHOR:  SKIP
00003  @The DEL-PE program is used to delete all phonetic
00004  @Alternate Keys used by the PHONET and LOOKUP programs.
00005  @DEL-PE is run on-line.
00100    IF W7-06-246 EQUAL 'DEL-PE'
00105      IF W7-01-264 NOT EQUAL 'A'
00110        MOVE 'A' TO W7-01-264
00115        PRINT-MESSAGE 'PP030'
00120        RETURN.
00130    MOVE ' ' TO W7-01-264.
00180    MOVE '03QPE' TO W7-05-008. DELETE-GLOBAL FILE01.
00200    PRINT-MESSAGE 'SC006'.
00300    MOVE '03QID' TO W7-05-008. READ-UNIQUE FILE01.
00400    IF STAT-KEY EQUAL '00' DELETE-GLOBAL FILE01
00500      PRINT-MESSAGE 'SC136'.
00600    IF W7-06-246 NOT EQUAL 'DEL-PE'
00700      MOVE '09P DEL-TNX' TO W7-11-008 READ-UNIQUE FILE01
00800      IF STAT-KEY EQUAL '00' LINK 'DEL-TN'.
```

5. Rebuild Phonetic/Employee ID Keys from the System Control Repository

The KEY-PE program requires a two-line control record.

The control records for each Phonetic Key type and each Organization Control Number value must be added to the KEY-PE job.

Each control record must have the appropriate FROM and TO values.

The following are the input files, output files, and the program you need to execute KEY-PE.

To execute this utility, you need to run CBSVB as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03	Audit/Message File
EXECUTE	CBSVB	

For control record line 1:

In these positions	Enter
17–22	Organization Control Number value
23–28	QUERY
56–61	KEY-PE
62–63	00
64–74	FROM Employee Number (positions 1–11)

In these positions	Enter
75	Continuation character '*'

For control record line 2:

In These Positions	Enter
16–23	FROM field entry (positions 12–19)
26–44	TO Employee Number

Control record example:

Phonetic and/or Employee ID Key Rebuild for organization 999999:

```
         1    1    2    2    3    3    4    4    5    5    6    6    7    7    8
....5....0....5....0....5....0....5....0....5....0....5....0....5....0....5....0
P QUERY LINE 1  999999QUERY                          KEY-PE000          *
P QUERY LINE 2           999999999
```

Phonetic and/or Employee ID Key Rebuild for organization 995555:

```
         1    1    2    2    3    3    4    4    5    5    6    6    7    7    8
....5....0....5....0....5....0....5....0....5....0....5....0....5....0....5....0
P QUERY LINE 1  995555QUERY                          KEY-PE000          *
P QUERY LINE 2           999999999
```

See also:

- Phonetic Keys ***(on page 234)***

To learn the various programs used in maintaining Alternate Keys.

Review of Questions answered

1. What is a QUERY Primary Key?

2. What is an QUERY Alternate Key?

3. What is a Phonetic Key?

4. What is an Employee ID Key?

5. How do you delete and rebuild QUERY Alternate Keys?

6. How do you delete and rebuild Phonetic and Employee ID Keys?

7. What are the pre-defined QUERY Alternate Keys?

8. What is Cyborg's recommendation for maintenance of both the QUERY Alternate Keys and Phonetic Keys?

CHAPTER 11

Maintaining the Client Data File

In This Chapter

Introduction

Customers using graphical user interfaces (GUI) for The Solution Series will make use of a Client Data File.

This file, FILECL32, contains duplicate information from the System Control Repository needed for editing and validating field data.

Any changes made to the System Control Repository must be reflected in the Client Data File. This section explains how to keep the System Control Repository and the Client Data File synchronized.

☞ *Refer to* **Setting Up Environments** *(on page 75) for information on the detailed contents of the Client Data File and how to set up this file.*

Tasks

You complete the following tasks to maintain the Client Data File:

- Update the Client Data File
- Rebuild the Client Data File

Prerequisites

Before you can begin maintaining the Client Data File, the following tasks must have been completed.

System setup and installation

You must have decided what the most effective setup is for locating the Client Data File. You should also have the Client Data Files installed.

☞ *Refer to* **Setting Up Environments** *(on page 75) for more information.*

Questions answered

The following questions are answered in this section:

1. What is the Client Data File?
2. What impacts the Client Data File?
3. How do you update the Client Data File?
4. When and how do you rebuild the Client Data File?

What is the Client Data File?

The Client Data File contains information replicated from the System Control Repository. Having this information replicated improves response time as editing is performed locally.

The Client Data File is stored locally on the client workstation.

The initial Client Data File is built with the following:

- Security Records
- Events Details
- Field names (only if a developer)
- The first line (000000) of the program for every EL program/form.

As the user enters a form for the first time, there may be a slight pause as the Client Data File is updated with the following details:

- Option lists specific to that form
- Field names specific to that form (if the user is not a developer)
- The SAT details for the form

The first time the user access a Position Administration form, the Position Administration data will be downloaded to the Client Data File.

The first time the internal report scheduler is called all report parameter details, and the header line of each report program is downloaded.

Multiple environment access

Customers often have multiple Solution Series environments, for example, development, test, and production. Certain users will need access to those multiple environments from their workstations. Each environment requires its own Client Data File.

Accessing multiple Solution Series environments from a single workstation requires the correct connection configuration. This ensures access of the correct Client Data File and, consequently, to the correct System Control Repository.

Changes that impact the Client Data File

Maintenance of the System Control Repository requires maintenance of the Client Data File.

Much of the updating of the Client Data File will be handled automatically. Under certain circumstances, you will be required to manually maintain this file.

All option list changes that are made using the Option List Editor (Codeset Edit Utility in version 3) immediately update the System Control Repository as well as the Client Data File being accessed by the user making the change.

Other users will have access to any changes made to the System Control Repository, but they will not see the equivalent changes made to their Client Data Files until they either sign off and back on, or run the Update Client File (UPDTCL) program.

Release 4.5 users may change the frequency of updates in the Change Options dialog.

Client Data File update (MCL) records

Client Data File update (MCL) records are automatically created on the System Control Repository whenever maintenance is done to an object that also needs to be updated on the Client Data File.

These records are used as input by the Update Client Data File program.

Client Data File update records are date and time stamped.

They are removed from the System Control Repository in two ways:

- After an Export Client File (MAKECL) job is run
- After 30 days

Consequently, if there are users who have not logged on for over 30 days, they may not have the latest changes. In this case, their Client Data File will have to be rebuilt or copied from another user.

Potential delays in updating the Client Data File

User access to the Client Data File will be less efficient when this file becomes disorganized due to a large number of online changes to the data it contains.

Whenever a user signs on to The Solution Series, there may be a delay while the system matches its contents with the current contents of the active System Control Repository.

This delay should only be noticeable when someone else, using a different Client Data File, has made significant changes to options lists, event menus, or data dictionary entries. Users should be advised that such delays may occur.

How the Client Data File is updated

The Update Client Data File utility (UPDTCL) uses the Client Data File update records on the System Control Repository to update the Client Data File.

You can execute the Update Client Data File utility in either of the following ways:

- Sign off and back on
- Run the Update Client Data File utility while online

Every time you sign on to The Solution Series, the Update Client Data File utility automatically updates the currently active Client Data File with any changes posted to the System Control Repository since the most recent sign-on involving this specific Client Data File.

The Update Client Data File program compares the date and time stamps on these two files and automatically synchronizes them.

When to rebuild the Client Data File

You should rebuild the Client Data File when the following conditions occur:

- When an 'out-of-sync' message is encountered. After an 'out-of-sync' message appears, you must rebuild the Client Data File.
- After a large number of online transactions have been applied to the System Control Repository and the Client Data File has been updated.

Rebuilding the Client Data File will reorganize its index file. By doing so, you will improve the application's performance.

Out-of-synchronization conditions

If any out-of synchronization condition occurs, it will be when The Solution Series is attempting concurrent updates to the System Control Repository and the Client Data File for the same activity.

Should the system detect that it can perform this operation for only one of the files, it will issue this error message:

FILE01 out-of-sync with Local file.

When this occurs, the only way to recover from the situation is to rebuild the active Client Data File and distribute it.

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Updating the Client Data File

Use either of the following methods to update the Client Data File with changes made to the System Control Repository:

1. **Sign off of The Solution Series**

2. **Sign on to The Solution Series**
   The Update Client Data File (UPDTCL) program will be executed automatically.

   or

   Run the Update Client File utility
   Run this utility by selecting:

   Component: Development Tools
   Process: System Operations
   Task: Update Client File

See also:

- **Changes that impact the Client Data File** *(on page 251)*

To learn what changes requires you to update the Client Data File.

Rebuilding the Client Data File---Online Method

After a large number of online transactions have been applied to the System Control Repository, and the Client Data File has been updated, you should rebuild the Client Data File to have its index file reorganized. By doing so, you will improve the application's performance.

There are two procedures you can use to rebuild the Client Data File.

To rebuild the Client Data File with the minimum amount of data, use the steps below.

Data required for a form will be added as each different form is accessed.

To rebuild a complete Client Data File, use the procedure that uses the Export Client File utility (MAKECL) which follows the steps below.

1. Sign off of The Solution Series

If you are signed on to The Solution Series, sign off.

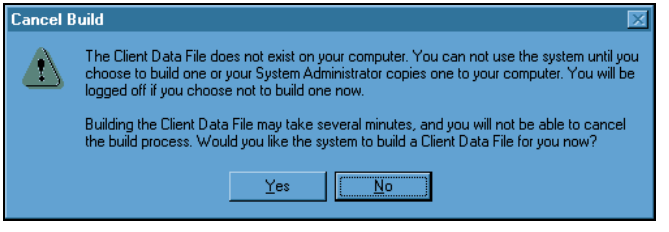
2. Delete the Client Data File (FILECL32)

Delete the Client Data File, FILECL32, using an operating system file utility tool.

3. Sign on to The Solution Series

Sign back on to The Solution Series.

After entering your User ID and Password, the following dialog is displayed.



4. Click Yes

Click **Y**es to rebuild the Client Data File.

A dialog will display indicating the progress as the file is rebuilt.

Rebuilding the Client Data File---Batch Method

After a large number of online transactions have been applied to the System Control Repository, and the Client Data File has been updated, you should rebuild the Client Data File to have its index file reorganized. By doing so, you will improve the application's performance.

1. To run the Export Client File utility in batch:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03 FILE10	Audit/Message File Extract Control Records File
EXECUTE	CBSVB	

Control record example:

```
         1    1    2    2    3    3    4    4    5    5    6    6    7    7    8
1...5....0....5....0....5....0....5....0....5....0....5....0....5....0....5....0

                       MAKECL
```

2. Run the Build Client Data File utility

Use the output file (FILE10) from Step 1 as input.

Note: If running MAKECL on a mainframe, you must first download the file to the PC.

INPUT	FILE10	from Step 1
OUTPUT	FILECL32	a Client Data File that contains duplicate information from the System Control Repository
EXECUTE	BuildFileCL32	

3. Copy the rebuilt Client Data File (if applicable)

Copy the rebuilt Client Data File into each user's working directory for The Solution Series.

See also:

- When to rebuild the Client Data File ***(on page 253)***

To learn when it becomes necessary to rebuild a Client Data File.

Review of Questions answered

1. What is the Client Data File?

2. What impacts the Client Data File?

3. How do you update the Client Data File?

4. When and how do you rebuild the Client Data File?

CHAPTER 12

Using the Backup and Restore Utilities

In This Chapter

Introduction

Developing a thorough plan for the backup and recovery of The Solution Series is an important component of system administration.

At many sites, backing up the system is handled by the system operations, and no special tasks are required of system administrators for The Solution Series. However, it is imperative that you be involved in the formulation of the backup and recovery plan.

This section addresses considerations for developing a backup and recovery plan. In addition, it provides detailed directions for using Cyborg-supplied utilities for backing up and restoring the System Control Repository.

There is no substitute for a system backup of all of the Cyborg files. However, there are Cyborg utilities available to assist in 'housekeeping' of the System Control Repository and the Employee Database.

Tasks

You must complete the following tasks to backup and restore the System Control Repository and the Employee Database:

- Backup the System Control Repository using the Backup (BACKEM) utility.
- Restore the System Control Repository using the Restore (DEMO01) utility.
- Backup and restore the Employee Database using the Pay Extract (PAYXTR) and Pay Merge (PAYMRG) programs.

Questions answered in this section

This section answers the following questions:

1. What should be considered in the backup and recovery plan?
2. Why is it important to have a sequential backup of the System Control Repository?
3. What facility is provided for creating a sequential backup of the System Control Repository?
4. What facility is provided for restoring from a sequential backup of the System Control Repository?
5. What programs are used for backing up and restoring the Employee Database?
6. What implications are there for users of the relational version of the system?
7. What synchronization issue exists between the System Control Repository and the Employee Database?

General considerations

When developing a backup and recovery plan, customers on all platforms should keep the following in mind:

- A clean copy of the installed files, saving the original source code, should be maintained.
- No logging facilities are provided.
- No automatic backup and recovery facilities are provided.

☞ *Refer to* **Setting Up Environments** *(on page 75) for a more detailed discussion of backup recommendations following system installation.*

Reasons for backups

There are a variety of reasons for backing up the system files, including the following:

- System failures
- Change control

Backup considerations for system failures

Your backup and recovery plan should account for the potential of a failure. Cyborg recommends that you take a daily backup of the online files.

At most sites, a Client Data File is maintained on each workstation. In the event of a hardware failure, a user can simply copy a current Client Data File from another user, if necessary.

☞ *Refer to* **Maintaining the Client Data File** *(on page 247) for more information on the Export Client File and Build Client File programs.*

Backup considerations for change control

After installing The Solution Series, most clients make custom code changes. And, periodically, Cyborg distributes update bulletins.

To be able to identify the custom code changes made at your site, you will need to have a backup of the original System Control Repository to compare to the current System Control Repository.

This comparison is done using the Change Control Facility Maintenance Output (MAINTO) utility.

The utilities for creating a backup of the System Control Repository are described below.

☞ *Refer to* **Customization** *(on page 107) and* **Analyzing and Editing the Difference File** *(on page 557) for more information on the Change Control Facility Maintenance Output (MAINTO) utility.*

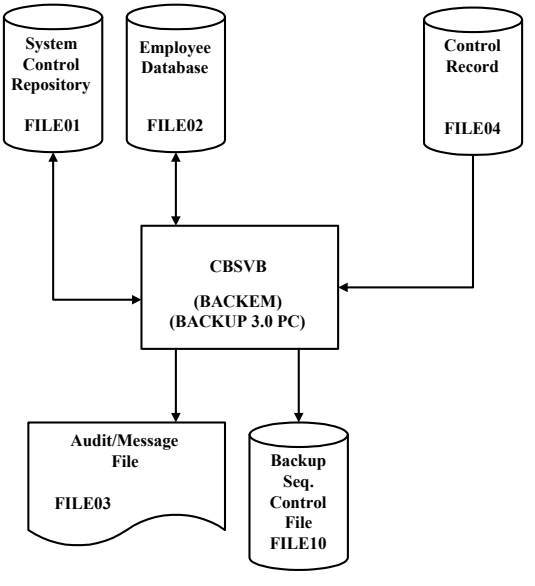
Backup of the System Control Repository

Cyborg provides a utility for backing up the System Control Repository, BACKEM.

If you are running version 3 on a PC platform, you must use BACKUP instead of BACKEM.

Either utility creates a sequential backup file (FILE10) containing all records found in the System Control Repository.

The following figure shows the flow of the BACKEM or BACKUP utility:



Notes: *The backup of the System Control Repository is written in record sequential format (fixed length records).*

UNIX customers must execute CBSVBT with the Backup (BACKEM) utility.

A Backup scenario

The importance of using the Backup utility, is when it is used—the date on the output file—and how it is used.

Consider the following scenario of a customer moving from a prior version to a new version of the system:

May 1

1. The customer loads the new version of the system into a test environment.
2. The customer runs the Change Control Facility Maintenance Output (MAINTO) utility on the prior version, using the saved DEMO0105 file from the prior installation. This identifies all changes made since the installation.

3. The customer runs the Change Control Facility Maintenance Input (MAINTI) utility against the new version of the system in the test environment. This applies all of the changes made since the installation.
4. The customer also runs the backup utility against the prior version of the system, to produce a sequential backup (DEMO0105/FILE10) as of May 1.

May 2 to July 31

1. The customer makes changes to the prior version of the system—the production system.
2. The customer tests the new version of the system—the test system.

August 1

1. The customer runs the Change Control Facility Maintenance Output (MAINTO) utility against the prior version—the production system—using the DEMO0105/FILE10 created on May 1. This identifies only those changes made since May 1.
2. The customer moves the new version of the system from test to production.
3. The customer runs the Change Control Facility Maintenance Input (MAINTI) utility against the new production system, using only those changes made since May 1.

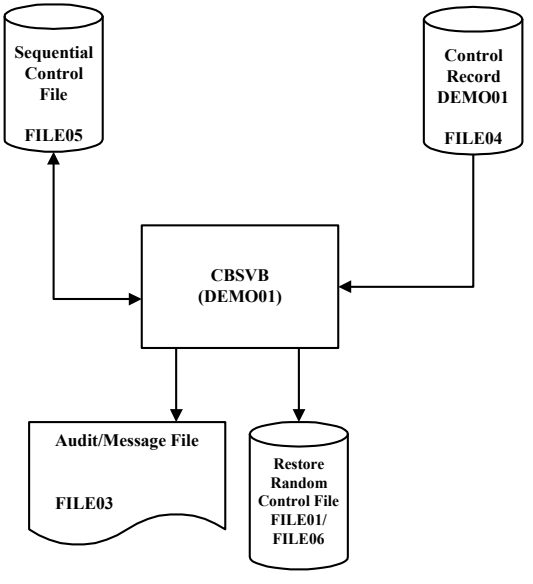
Restoration of the System Control Repository

After creating a sequential backup of the System Control Repository using the Backup utility, you can use that sequential file in the restore process. The restore process creates a new random System Control Repository.

To restore the System Control Repository from a sequential backup, you use the Restore System Control Repository (DEMO01) utility.

This utility is run with an execution of CBSVB or CBSVBT.

The following figure shows the flow of this utility:



Note: UNIX customers must execute CBSVBT with the Restore System Control Repository (DEMO01) utility.

Backup considerations for the Employee Database

You can create a backup of the Employee Database using either your system utilities or the Pay Extract (PAYXTR) program.

The Pay Extract (PAYXTR) program creates a batch master file, P20.

After running this program, you should reset security using the Reset Security Records (CYBRST) program.

Note: Time entries and adjustments will be written to FILE10.

Relational version considerations

In the relational version of The Solution Series, the System Control Repository and the Employee Database contain information required for successful relational database processing. The System Control Repository contains RFM and RFT records.

The Employee Database contains the primary keys for accessing the data in the tables. Consequently, customers should ensure that these files and the database are backed up together.

☞ *See* **Performance Tuning for Relational Databases** *(on page 351) for information on the effects of EXT records on Pay Extract processing.*

☞ *Refer to* **Data Structures and Processing Modes** *(on page 45) for more information on the data structures used in the relational version of the system.*

Synchronization of object code

Object code for The Solution Series is stored on the System Control Repository as P/X records.

To improve response time, a copy of the object code for these programs is copied to the Employee Database as ZX records.

This occurs when a program is executed and the object code is not found on the Employee Database. Consequently, it is important that these two files have the same versions of the object code.

When The Solution Series is running, it is the code on the Employee Database that is executed, not the code on the System Control Repository.

If the results of processing are not as expected, determine if the code on the Employee Database is the most current.

To ensure that the object code you are running is from the System Control Repository, you can run the Remove ZX (executable code) records from the Employee Database (ZX-DEL) utility. This utility deletes all executable code (ZX) records from the Employee Database.

To synchronize the executables, of a single program, you use the Purge Object Code from FILE02 (PRG02X) utility. You can run this utility online or in batch.

Note: *If a PAYMRG 171 is done, all ZX records are dropped from the Employee Database.*

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Running BACKEM

You use BACKEM to make a sequential copy of the System Control Repository.

To run BACKEM, execute CBSVB or CBSVBT as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03 FILE10	Audit/Message File Sequential backup file
EXECUTE	CBSVB or CBSVBT	UNIX customers must use CBSVBT

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	BACKEM	program name

Running BACKUP

To run BACKUP, execute the following:

1. Logon to The Solution Series.
2. Access the Enter a Command dialog box using the menus.
3. Type 'BACKUP' in the Screen entry box and press Enter.
   The message BACKUP.10 IS BEING OPENED-PRESS F10 displays.
4. Press Enter again.
   After several minutes the BACKUP.10 file is created in your directory. The message BACKUP.03 IS BEING OPENED-PRESS F10 displays.
5. Press Enter again.
   The System Control Repository is backed-up and renamed BACKUP.10. A message similar to the sample below displays:

```
BACKUP V001  02-20-1991 09:26:46----COMPLETE----
RECORD COUNT-47,712
----COMPLETE----
```

6. Log off The Solution Series.

See also:

- General considerations ***(on page 261)***

To learn the items you should consider in backing up your system.

Running the Restore System Control Repository utility

You use the Restore System Control Repository (DEMO0105) utility to create a random version of the sequential backup of the System Control Repository created with the BACKEM or BACKUP utility.

To run the Restore utility, you execute CBSVB or CBSVBT as follows:

INPUT	FILE04 FILE05	Control Record File Sequential Control File
OUTPUT	FILE03 FILE01/FILE06	Audit/Message File Random Control File
EXECUTE	CBSVB/CBSVBT	UNIX customers must use CBSVBT

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	DEMO01	program name

FILE01/FILE06 is used only by the Restore process.

Once restored, FILE01/FILE06 should be referred to as FILE01 for all subsequent processing.

The reference to the logical FILE01 (open as input/output) or FILE06 (open as output only—only used when creating FILE01) is machine dependent. Refer to your specific installation job stream to determine your specific use.

See also:

- General considerations ***(on page 261)***

To learn the items you should consider in backing up your system.

Backing up the Employee Database

You can backup the Employee Database using either your system utilities or using the Pay Extract (PAYXTR) program. When using the Pay Extract (PAYXTR) program, you will need to extract all organizations.

To run this program, you execute CBSVB as follows:

INPUT	FILE01 FILE02 FILE04 FILE11	System Control Repository Employee Database Control Record File Batch Master File
OUTPUT	FILE03 FILE10 FILE12	Audit/Message File Time entries and adjustments Extract batch master file (P20)
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	PAYXTR	program name
31–33	ALL	

See also:

- Backup considerations for the Employee Database ***(on page 265)***

To learn how the Employee Database and System Control Repository are related.

Synchronizing the executables

If you have multiple Employee Database executables in production, you must synchronize the executables on the System Control Repository and the Employee Database.

Use the Purge Object Code from the Employee Database (PRG02X) utility. You can execute this utility online or in batch.

Executing PRG02X online

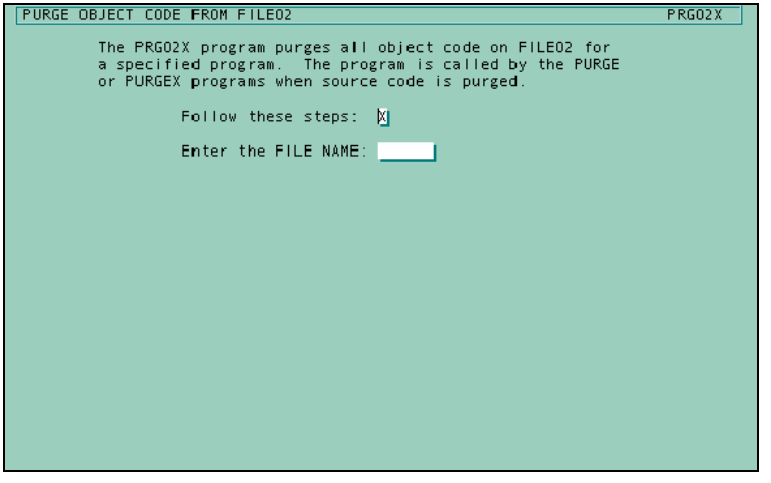
To execute the Purge Object Code from the Employee Database (PRG02X) utility, follow these steps.

1. Access the Purge Object Code from FILE02 form

You access this form by selecting:

Component: Development Tools
Process: Employee Database Utilities
Task: Purge Employee Database Objects

The PRG02X prompt form appears:



2. Enter the name of the program whose object code you want to delete

Enter this six-character name in the File Name field.

3. Press Enter

The system purges the object code for the specified program and returns the message *--COMPLETE--*.

The system *does not ask for verification* of the deletion. However, the system recreates the program's object code on the Employee Database the next time the program is executed.

Executing PRG02X or ZX-DEL in batch

Execute the Purge Object Code from the Employee Database (PRG02X) utility or the Delete ZX Records from FILE02 in batch as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03	Audit/Message File
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	PRG02X or ZX-DEL	program name
31–40	object key	(PRG02X only)

You can set up multiple control records in the same run. For example:

```
  1         2         3         4         5
12345678901234567890123456789012345678901234567890123456789
P PRG02XJ00100         PRG02X  F-SEGM
```

```
P PRG02XJ00100          PRG02X  SRTFLD
P PRG02XJ00100          PRG02X  COPY
```

See also:

- Synchronizing the executables ***(on page 270)***

To learn how the PRG02X utility synchronizes the executables in the System Control Repository and the Employee Database

Review of Questions answered

1. What should be considered in the backup and recovery plan?

2. Why is it important to have a sequential backup of the System Control Repository?

3. What facility is provided for creating a sequential backup of the System Control Repository?

4. What facility is provided for restoring from a sequential backup of the System Control Repository?

5. What programs are used for backing up and restoring the Employee Database?

6. What implications are there for users of the relational version of the system?

7. What synchronization issue exists between the System Control Repository and the Employee Database?

CHAPTER 13

Running Report Options

In This Chapter

Introduction

This section provides the information you need to administer the reporting function of The Solution Series.

*Note: This section does **not** cover payroll reporting. For information on administering payroll reporting, refer to the Payroll Reports and Balancing Guide.*

Tasks

You must complete the following tasks to run reporting solutions:

- Execute queries developed in Solution View (WRITER)
- Defining valid reports for an organization
- Initiate report runs in batch
- Set up the job streams to submit and view reports online
- Initiate a report run online
- View held reports online

Questions answered in this section

This section answers the following questions:

1. What is the role of the system administrator in reporting?
2. What control structures need to be set up to administer reporting?
3. What is the flow of the batch report process?
4. What facilities are available for initiating and viewing reports and batch queries online?
5. What are consolidated and roll up reporting?

Role of the system administrator in reporting

Typically, end users determine which reports should be printed and when they should be printed. The system administrator ensures that the end users' needs are met by doing the following:

- Setting up control structures for running reports
- Defining or modifying report job streams
- Submitting report job streams

The Query Facility

Queries developed with Solution View (WRITER) can be run online or in batch using the Query Facility (QUERY).

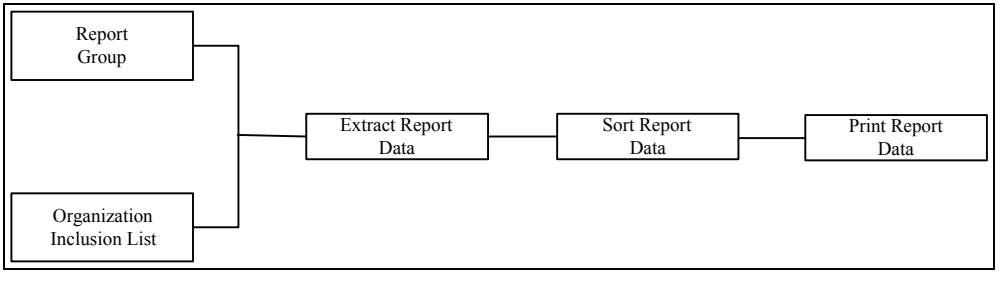
Batch reporting process

To run any standard reports included with the system, or any customized reports you have developed, you must set up certain reporting control structures, and then run report programs.

The control structures, for example, specify what reports to produce.

The report programs create the extract records and print the report output.

The following figure shows the flow of the batch reporting process:



Control structures for reporting

The following structures are used for controlling the running of The Solution Series reports:

- Report Group Activities (RGMSTR)
- Valid reports for an organization (C12RPT) (optional)

Report Group Activities---RGMSTR

The only required structure for running reports is a report group.

A report group is a structure that allows you to specify what reports should be run together. Once you set up a report group, you can add any parameters for the reports and indicate what company data to include on the reports.

Each report group must be assigned a unique, six-position identifier. Special parameters, such as dates, can be added for each report.

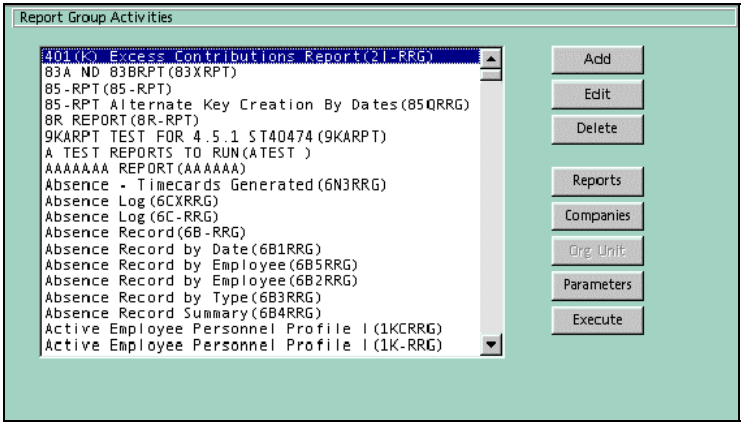
A maximum of 20 reports can be included in a report group.

All report groups that are delivered with The Solution Series end in 'RG' to distinguish them from regular programs

Note: *If you are using version 4.5.1 and the online reporting feature, the report group name must end in 'RG' if you plan to launch it from the Navigator menu. Because report groups embedded in a user-defined checklist must already exist on the menu, this naming convention also applies to checklist-launched reports.*

If you add a report group that will be launched only from the Report Group Activities form (RGMSTR), the report group name can end in any characters. There is no restriction.

Report groups are defined by completing the Report Group Activities (RGMSTR) form.



The Solution Series is delivered with many different report groups set up for you.

Most components of The Solution Series have report groups already defined. For example, there are report groups defined for Applicant Tracking and Benefits Administration.

You can add your own groups using combinations of delivered reports and reports that your company has customized.

You can define both public and private report groups. Public report groups can be scheduled and run by anyone using the system, while private report groups are for your personal use only.

You can run reports as a background process on the server. These reports can be run directly from the Report Group Activities form (RGMSTR), from the menus and navigator, or from checklists.

Note: Position Administration reports are not currently supported by this feature.

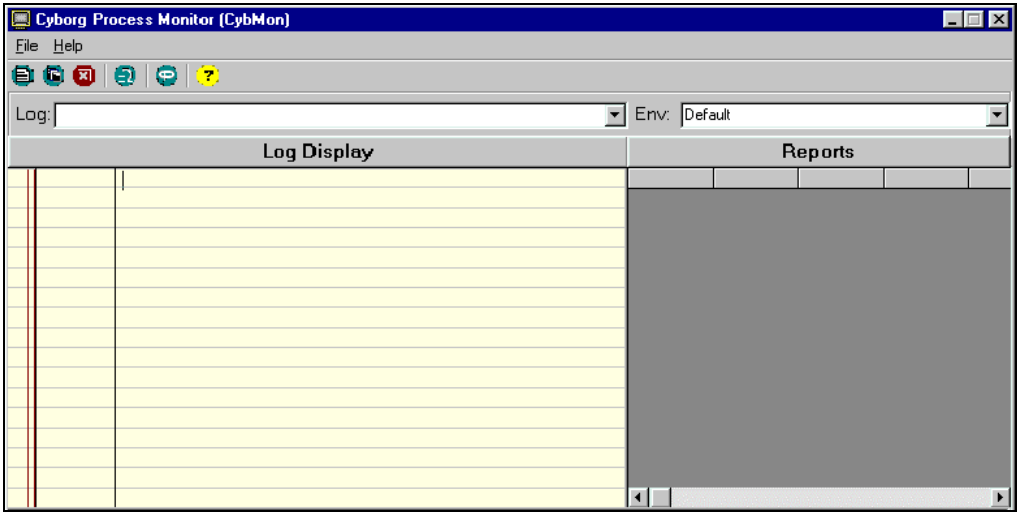
Process Monitor

The Process Monitor allows you to monitor the status of any report that is running.

Using the Process Monitor, you can set up and select processes by environment or by user. You can also display the progress of batch processes in a checklist format, which shows the completion status of individual components of the report.

The status is refreshed every five seconds, although you can set the refresh rate to your preference.

You can also launch the Report Viewer from the Process Monitor.



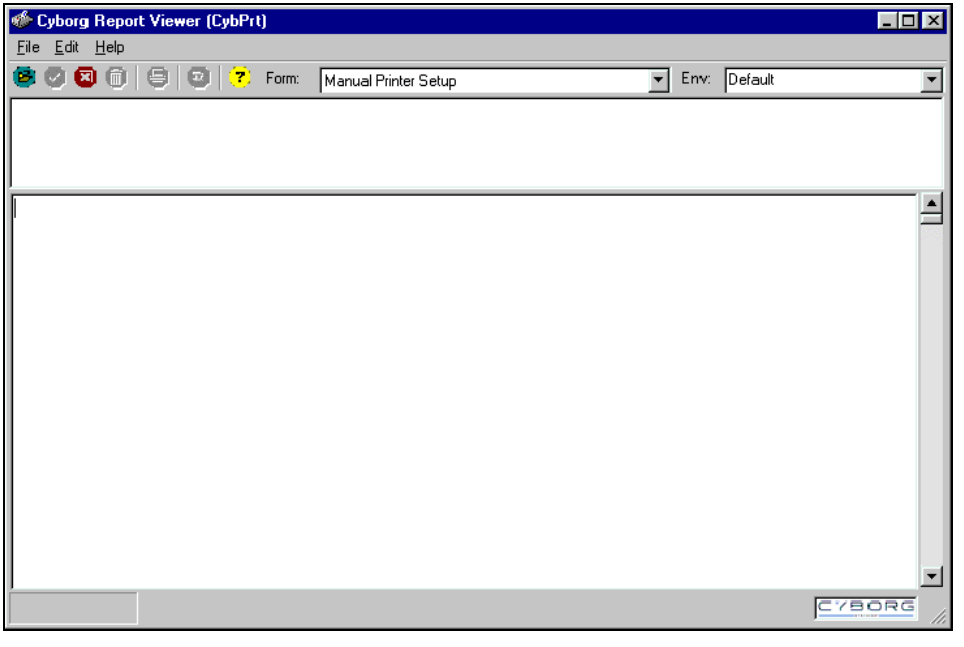
Note: This utility is currently only available on an NT platform.

Report Viewer

The Report Viewer displays the completed report in a customizable window. The reports are stored in your own user folder, and you can customize your viewing and printing preferences.

You can print all the reports or selected reports within a report group. You cannot print selected portions of a report.

You can search and jump within reports. You can also save and delete reports.



Note: *This utility is currently only available on an NT platform.*

☞ *Refer to the Using The Solution Series: Administrative Solutions manual for detailed information about setting up report groups and launching and viewing reports online.*

Report-specific parameter forms

Reports that require parameters have parameter entry forms specifically designed for them.

Some reports share the same report parameter form. For example, the Non-Monetary Perquisite Information report (13-RPT) and the Scheduled Salary Reviews Within Selected Months report (19-RPT) both use the same report parameter form.

Valid reports for an organization---C12RPT

You can set up a valid report for an organization structure if you want to explicitly specify which reports will be valid for an organization.

If you use this option, only those reports entered on the Optional Report Schedule Control (C12RPT) form will be produced for the organization. Therefore, you should use this option judiciously.

The batch reporting programs and steps

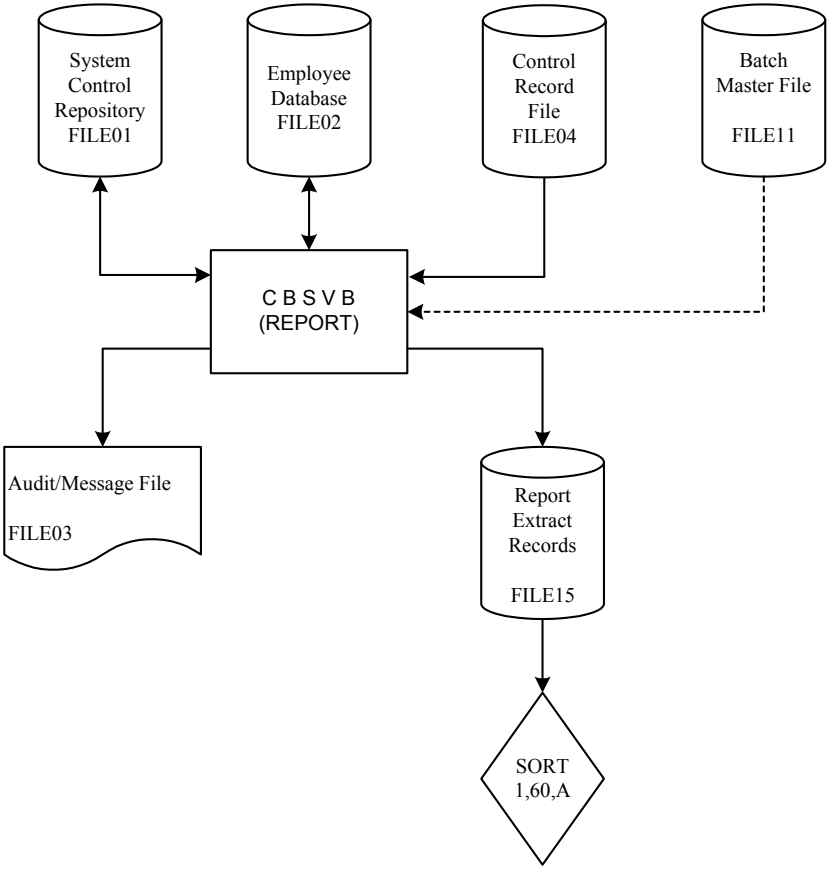
The batch reporting process consists of three steps—extract, sort, and print.

1. Report Extract---REPORT

This program creates report extract records by executing each of the report programs included in a specified Report Group.

To run this program, you execute CBSVB or CBSVBT with a control record as FILE04.

The following figure shows the flow of this program:



2. Sort

The sort step of the job stream prepares the report extract records for the final Report Print step by:

- reading each report extract record (FILE15)
- sorting each record based on the first 60 characters
- writing the sorted report extract records to FILE14

About the sort key

The actual length of the sort area for each report record varies from report to report.

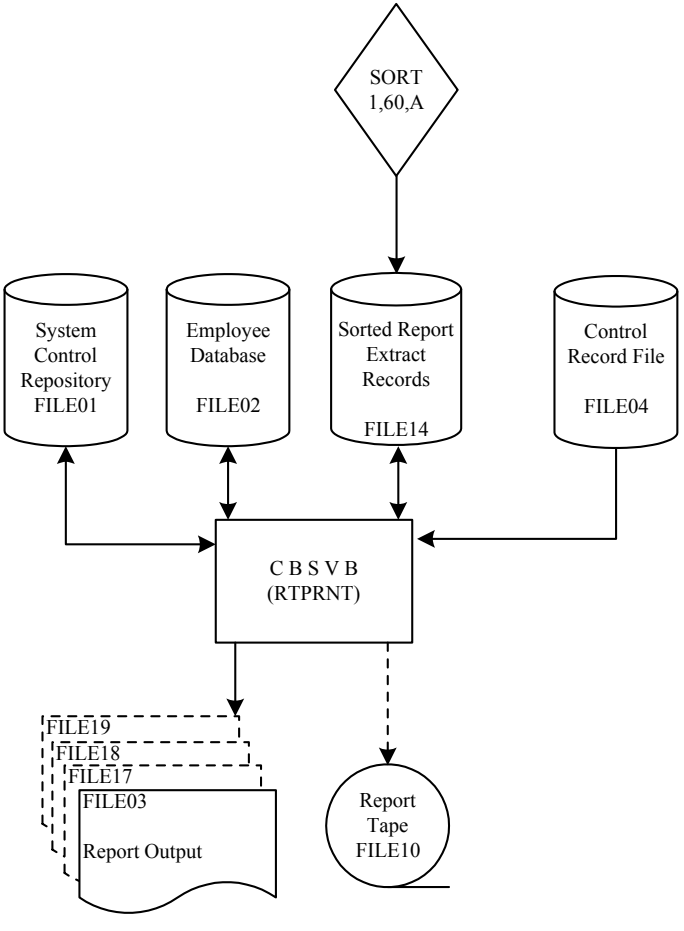
To accommodate all possible sort key lengths defined in your job stream, use a sort key starting position of 1, for a length of 60, in ascending sequence.

3. Report Print---RTPRNT

This program reads the sorted extract records (FILE14), reformats them, and writes them to either FILE03 or one of the alternate print files (FILE17, 18, or 19).

To run this program, you execute CBSVB or CBSVBT with a control record in FILE04.

The following figure shows the flow of the this program:



Online report initiation and viewing

As an alternative to the standard batch reporting steps, you can submit, route, and view reports or queries from an online session. You will find this helpful when working with new reports.

Requesting Reports and Queries Online (SUBMIT)

This program enables you to submit batch jobs. It tells the system to run a query or a report. You can direct the output records to a print file or to the Employee Database for online viewing.

If you direct the output records to the Employee Database, the ROUTER batch subroutine is automatically invoked.

The online (ZR) records are temporary and are deleted when the Employee Database is rebuilt or when the reports are deleted or printed using the View Held Report (VIEW) program.

To avoid space problems, you should limit SUBMIT processing to low-volume reports and queries.

Before you can execute a SUBMIT job, you must prepare the following job streams:

Use this job stream:	To do this:
JRPTopid	Submit reports
JQRYopid	Submit queries
JPRTopid	Write output

Viewing Reports and Queries Online---VIEW

This program enables you to view online the output from the Requesting Reports and Queries Online (SUBMIT) program. The reports may then be printed or deleted.

You can display the first or last 80 positions of a report or query record. You can page up or down in a report or query. However, when you display the last printed page of output, the system prevents you from returning to a previous page.

Reporting considerations

Maximum report lines per page

The maximum number of lines to print on Cyborg reports is set to a default value when the system is installed. The Security Officer can modify these values on the System Options form.

For reports not using Formatting Report Records---RTPRNT

For reports not using batch reporting and RTPRNT conventions, the maximum values depend on the number of lines per inch (lpi) your printer prints.

The maximum number of lines is as follows:

Lines per inch (LPI)	Maximum Lines
6	66
8	88

For reports using Formatting Report Records---RTPRNT

For reports using batch reporting and RTPRNT conventions, the maximum values depend on the number of lines per inch (lpi) your printer prints.

The maximum number of lines is as follows:

Lines per inch (LPI)	Maximum Lines
6	54
8	76

The RTPRNT program has a lower maximum number of lines per page to allow for headings and total lines on the page.

Consolidated and roll-up reporting

The Solution Series supports both consolidated and roll-up reporting. Special security privileges are required to set up these reporting structures.

Consolidated reporting

Consolidated reports include employees in all or selected organizations.

To set up a consolidated reporting structure, you first establish a report-only Organization Control Number.

The heading information from this report-only Organization Control Number is used on any consolidated reports produced. Any organization-specific headers are removed to indicate that the report is not organization specific. There must be no employees within this organization.

The organizations that you want to include in the report are identified on the Report Company Schedule form as for any other report.

To generate a consolidated report that includes employees in all or selected organizations, you insert a 'C' in position 52 of the report control record in batch.

To execute consolidated reporting from the Batch Job Initiator (SUBMIT) form, complete the 'Normal, roll-up, or consolidated' field.

Roll-up reporting

Roll-up reports include all employees with a common Org value, such as CS0001 or CS0002.

You must plan your control structures carefully to do roll-up reporting.

To set up a roll-up reporting structure, you first establish a report-only organization.

You then create a new reporting entity consisting of the Org value and the OL2 (Organization Level 2) value from the report-only Organization Control Number.

You create this combination of Org and OL2 for each group to appear on a report.

A separate report will be printed for each combination of Org and OL2.

The organizations that you want to include in the report are identified on the Report Company Schedule form as for any other report.

To produce a roll-up report that includes all employees within a common Org value, you insert an 'R' in position 52 of the report control record.

To execute roll-up reporting from the Batch Job Initiator (SUBMIT) form, complete the 'Normal, roll-up, or consolidated' field.

Considerations

Keep the following in mind when setting up these reporting structures:

- Both are optional features and do not affect standard batch reporting if you elect not to use them.
- A special organization must be set up prior to initiating consolidated or roll-up reports.

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Executing Queries online

To run a query online, follow these steps:

1. Access the QUERY dialog

Access this form by selecting:

Component:  User Tools
Process: User Tools
Task:  Run a Query

2. Enter the Query name

Enter the name of the Query developed under Solution View.

3. Specify a key from the drop-down list

The key indicates the search order for information on the file and the order in which data will be displayed on the QUERY form.

4. Enter the beginning range parameter

5. Enter the ending range parameter

You must enter an ending range parameter.

6. Enter an Organization

Enter the Organization to query. How you do this depends on how your user options for selecting Organizations are set.

If you have opted to select Organizations by number, type the number in to the **O**rganization text box on the dialog.

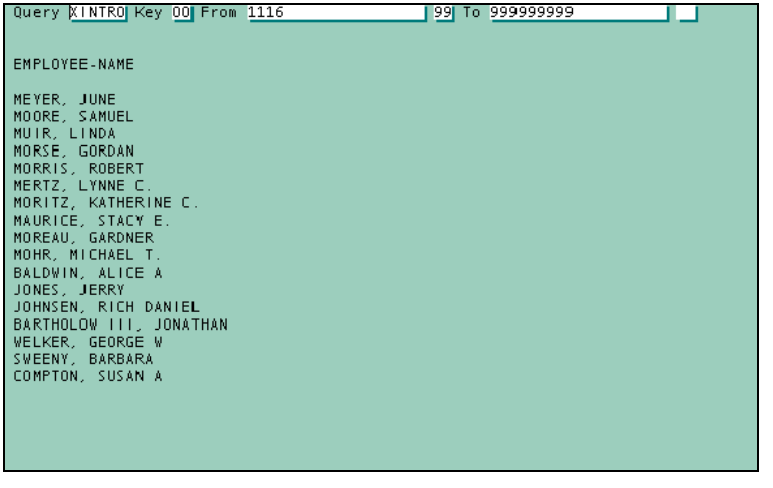
If you have not opted to select Organizations by number, select the Organization by name from the drop-down list.

7. Press Enter or click OK

The Solution Series executes the Query and displays the results on the QUERY form.

The following form shows the first page of the results of running the XINTRO query.

When a query results in multiple forms of results, press Enter to view the next page.



Executing Queries in batch

To run a query in batch, you provide a control record in the Control Record File (FILE04) that specifies the query run-time parameters.

To run a query in batch, you execute CBSV as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03 FILE10 FILE15	QUERY report print file Optional 80-character output Optional 150-character output
EXECUTE	CBSVB or CBSVBT	

The control record for line 1 of the query has the following syntax:

In these positions	Enter	Description
16	W	Required character
17–22	Organization Control Number value	
23–28	QUERY	
56–61	query name	
62–63	key	
64–74	FROM	FROM field entry (positions 1–11)
75	*	Continuation character

The control record for line 2 of the query has the following syntax:

In these positions	Enter	Description
16–23		FROM field entry (positions 12–19)
24–25		Duplicate key field
26–44		TO field entry
45–46		Duplicate key field

Defining valid reports for an organization (optional)

You set up an inclusion list if you want to specify which reports are valid for each organization on your Employee Database.

To define an inclusion list, follow these steps:

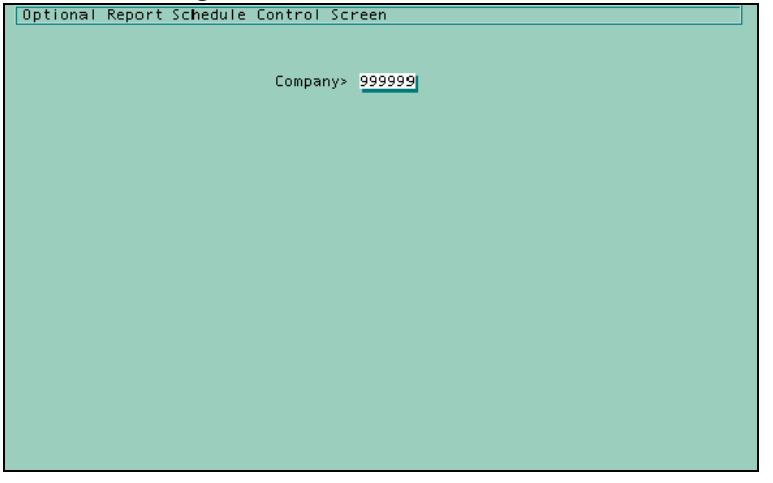
1. Access the Optional Report Schedule Control form

Access this form by selecting:

Component: Reporting
Process: Report Scheduling
Task: Specify Reports for Organization

The first page of the Optional Report Schedule (C12RPT) form is displayed.

2. Enter a valid Organization Control Number



3. Press Enter

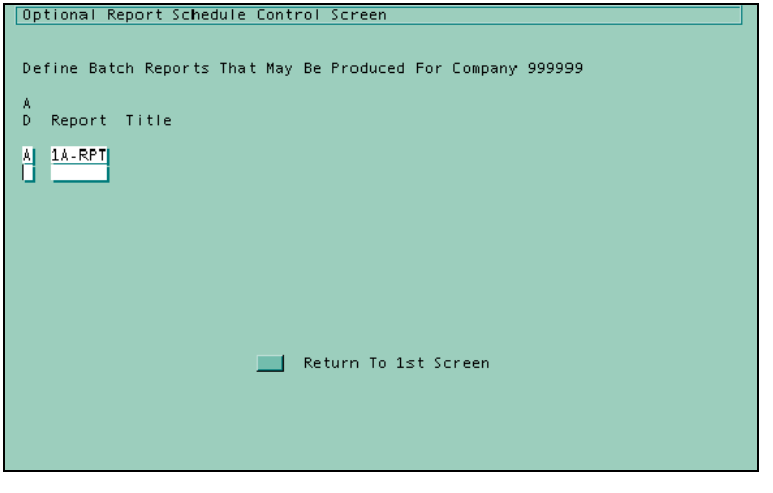
The Optional Report Schedule Control form is displayed.

4. Indicate an action to take

Type an 'A' in the action field to add.

5. Specify valid reports for the organization

Enter the exact name of a report. For example, you would enter 1A-RPT to include an alphabetical listing of active and inactive employees.



6. Press Enter

The first 25 positions of the report titles will display in the Report Title field.

See also:

- Control structures for reporting ***(on page 280)***

To learn about setting up valid reports for an organization.

Initiating a report run in batch

To initiate a report run in batch, you run three programs:

- Report Extract (REPORT)
- Sort
- Report Print (RTPRNT)

Running the Report Extract (REPORT program)

To run the Report Extract (REPORT) program, you execute CBSV as follows:

INPUT	FILE01 FILE02 FILE04 FILE11	System Control Repository Employee Database Control Record File Batch Master File (optional)
OUTPUT	FILE03 FILE15	Audit/message file Report extract file
EXECUTE	CBSVB or CBSVBT	

The control record for the REPORT program has the following syntax.

To execute more than one Report Group, include multiple control records.

In these positions	Enter	Description
17–22	Organization Control Number value	Leave blank if you have established an organization inclusion list or if you want to include all organizations
23	REPORT	Name of the program
31–36	report group name	Name of the Report Group
41–44	Fnnn	(Optional) Limit number of employees on report
52	C R	Consolidated report Roll-up report
53–55	F11	Produce reports using FILE11 instead of FILE02
	Qnn	Alternate key ID to report

Running the SORT program

This step prepares the extracted report records for the final Report Print (RTPRNT) step.

The SORT step:

- Sorts each record based on the sort key.
- Writes the sorted report extract records to FILE14.

  This file will be read into the Report Print (RTPRNT) step.

Defining the sort key

To handle all possible sort key lengths defined in your job stream, use a sort key starting in position of 1, for a length of 60, and an ascending sequence.

Running the Report Print (RTPRNT program)

The Report Print (RTPRNT) program reads sorted extract records.

After the records are read, they are reformatted and written to either FILE03 or to an alternate print file.

To run the Report Print (RTPRNT) program, you execute CBSV as follows:

INPUT	FILE01 FILE02 FILE04 FILE14	System Control Repository Employee Database Control Record File Sorted Report Extract File
OUTPUT	FILE03 FILE10 FILE17, 18, 19	Report print file Optional tape report file Alternate print files
EXECUTE	CBSVB or CBSVBT	

The control record for the RTPRNT program has the following syntax:

In these positions	Enter
23–28	RTPRNT

See also:

- The batch reporting programs and steps ***(on page 284)***

To learn more about the batch reporting programs and steps.

Setting up the job streams for SUBMIT and VIEW

You must set up three job streams to use SUBMIT and VIEW:

- Report Batch Initiator (JRPTxxxx)
- Query Batch Initiator (JQRYxxxx)
- Print Batch Initiator (JPRTxxxx)

Setting up the Report Batch Initiator (JRPTxxxx) job stream

The processing flow of this job stream follows the report steps of Extract, Sort, and Print.

This job stream requires two control cards, one for the Extract step and one for the Print steps.

You run JRPTxxxx by executing CBSVB or CBSVBT as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03 FILE15	Audit/Message file Report Extract records
EXECUTE	CBSVB or CBSVBT	

The Extract step control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	F04F01	Name of the program
31–40	<CTRLRT	Key
41–44	op ID	The four-position ID of the user who will run the job stream
45	A	

The Print step control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	F04F01	Name of the program
31–40	<CTRLRT	Key
41–44	op ID	The four-position ID of the user who will run the job stream
45	D	

Setting up the Query Batch Initiator (JQRYxxxx) job stream

This job stream will direct the process to the various input and output files.

You run JQRYxxxx by executing CBSVB as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03 FILE10 FILE15	Audit/Message file 80-character output file (optional) 150-character output file (optional)

EXECUTE	CBSVB or CBSVBT	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	F04F01	Name of the program
31–40	<CTRLRT	Key
41–44	op ID	The four-position ID of the user who will run the job stream
45	H	

Setting up the Print Batch Initiator (JPRTxxxx) job stream

This job will extract, print and delete the report from the Employee Database.

You run JRPTxxxx by executing CBSVB or CBSVBT as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03	Audit/Message file
EXECUTE	CBSVB or CBSVBT	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	F04F01	Name of the program
31–40	<CTRLRT	Key
41–44	op ID	The four-position ID of the user who will run the job stream
45	M	

See also:

- Online report initiation and viewing ***(on page 287)***

To learn more about requesting and viewing reports online.

Initiating a report run online by submitting a report online

To initiate a report run online, use the Batch Job Initiation Menu.

You can submit either a report or a batch query.

The output from the Batch Job Initiation Menu can be held for online viewing.

To submit a report online, follow these steps:

1. Access the Batch Job Initiation Menu

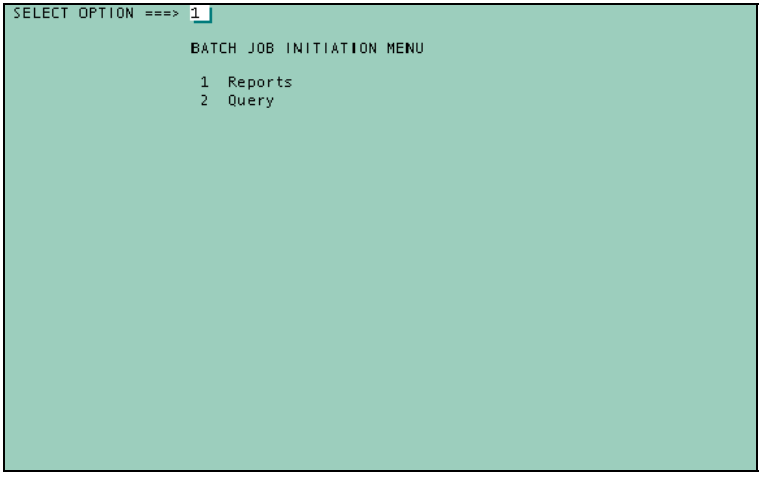
Access this form by selecting:

Component: Reporting
Process: Report Scheduling
Task: Initiate Scheduled Reports

The Batch Job Initiation Menu is displayed.

2. Select the type of batch job to be initiated

Enter a '1' for reports.



3. Press Enter

The system displays the Report Batch Job Initiator form.

4. Enter the name of the Report Group

This Report Group ID must already exist, for example, 'WEEKLY'.

5. Specify the routing option

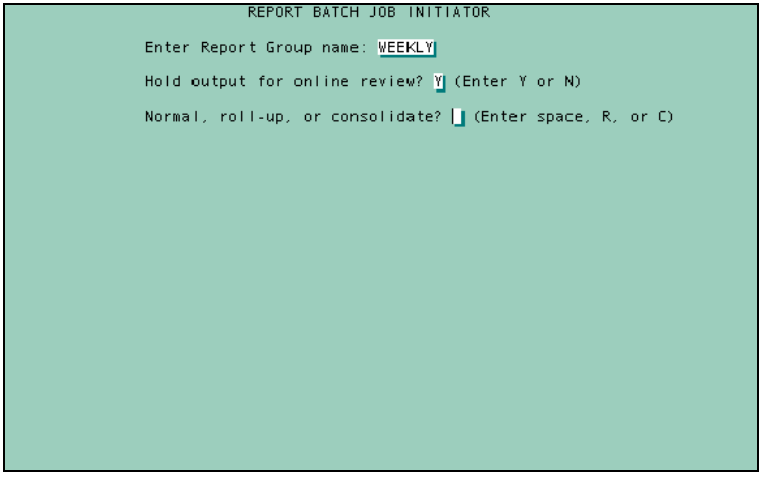
Enter a 'Y' to hold the records for online review. Enter an 'N' to route the report output to a print file.

6. Indicate consolidation/roll-up reporting (optional)

Leave this field blank if you are not doing consolidation or roll-up reporting.

The consolidation or roll-up reporting structures must already exist.

☞ *Refer to* **Customization** *(on page 107) for directions on setting up consolidation and roll-up reporting structures.*



7. Save the form

Depending on the platform on which you are running, the SUBMIT process will do one of the following:

- Display the message 'JOB JRPTxxxx SUBMITTED', and submit the batch job stream to execute the Report process.
- Display the message 'LOG OFF TO SUBMIT JOB JRPTxxxx'. If you see this message, you must log off the system and submit the job stream.

Initiating a report run online by submitting a batch query

To initiate a report run online, use the Batch Job Initiation Menu.

You can submit either a report or a batch query.

The output from the Batch Job Initiation Menu can be held for online viewing.

To submit a batch query online, follow these steps:

1. Access the Batch Job Initiation Menu

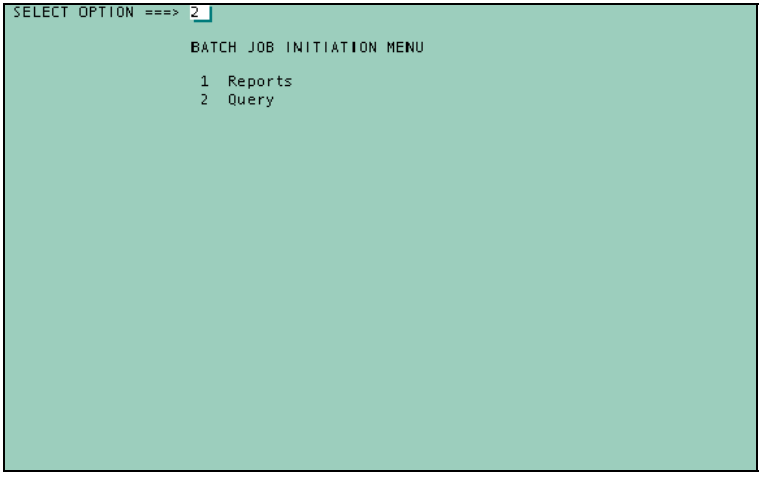
Access this form by selecting:

Component: Reporting
Process: Report Scheduling
Task: Initiate Scheduled Reports

The Batch Job Initiation Menu is displayed.

2. Select the type of batch job to be initiated

Enter a '2' for queries.



3. Press Enter

The system displays the Query Batch Job Initiator form.

These fields will be used to created the batch control record and to determine the routing of the report output.

4. Enter the Control 1-2 (Organization Control Number) to use for the query

If you use 00 as the alternate key, you must supply an Organization Control Number for the query.

For any other alternate key you use, the alternate key will determine which organizations will be accessed by the query.

5. Enter the name of the query

The query must already exist.

6. Enter the key for accessing data

For example, 00 to sort the data by employee number.

7. Enter the 'from'-range value

For example, 000000000 to start at the first employee.

8. Enter the 'to'-range value

For example, 999999999 to end at the last employee.

9. Specify the routing option

Enter a 'Y' to hold the records for online review.

Enter an 'N' to route the report output to a print file.

10. Press Enter

Depending on the platform on which you are running, the SUBMIT process will do one of the following:

- Display the message 'JOB JQRYxxxx SUBMITTED', and submit the batch job stream to execute the Report process.
- Display the message 'LOG OFF TO SUBMIT JOB JQRYxxxx'. If you see this message, you must log off the system and submit the job stream.

See also:

- Online report initiation and viewing ***(on page 287)***

To learn more about requesting reports and queries online.

Launching a report from the Report Group Activities form

To launch a report from the Report Group Activities form (RGMSTR), complete the following steps:

Note: In a classroom setting, each student must have a unique User Code, Password, and Operator ID, and user folder to successfully complete the Guided Practice for this task.

1. Access the Report Group Activities form

Access this form by making the following selections from the Navigator:

Component: Reporting
Process: Report Scheduling
Task: Schedule Report Groups

For practice, access the Report Group Activities form (RGMSTR).

2. Select the report group

Select the report group that contains the report (s) to be run.

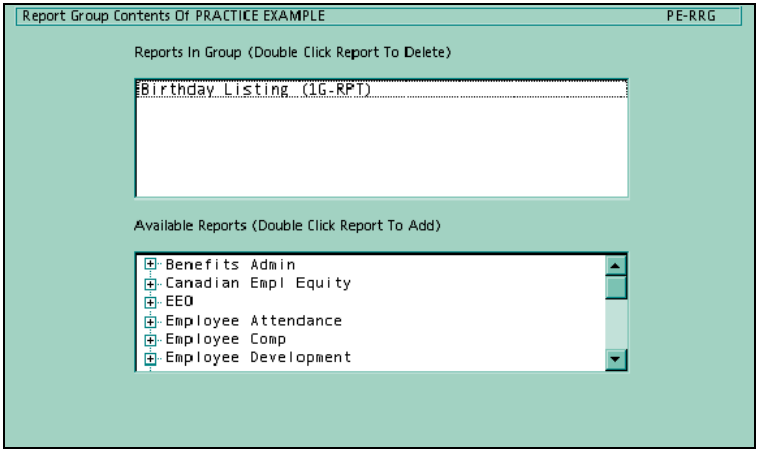
For practice, select the 'Practice Exercise' report group (PE-RRG).

3. Click Reports

Click the Reports button to view the reports currently in the report group. Change as necessary.

For practice, ensure that the Birthday Listing (1G-RPT) is the only report in this report group.

If you completed the Guided Practice, the resulting form should look similar to the example that follows:



4. Click Save or press Enter

Save the form and return to the Report Group Activities form (RGMSTR).

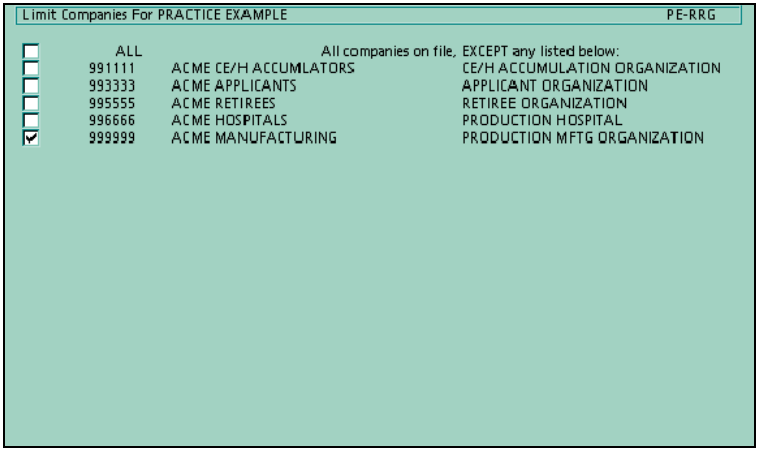
For practice, press Enter to return to the Report Group Activities form (RGMSTR).

5. Click Companies

Click the Companies button to view the list of companies to be included in the report. Change as necessary.

For practice, click the Companies button and select only '999999 ACME MANUFACTURING'.

If you completed the Guided Practice, the resulting form should look similar to the example that follows:



6. Click Save or press Enter

Save the form and return to the Report Group Activities form (RGMSTR).

For practice, press Enter to return to the Report Group Activities form (RGMSTR).

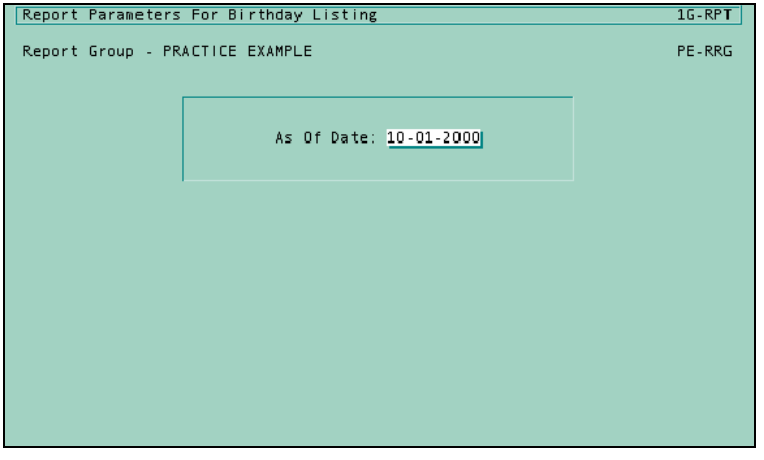
7. Click Parameters

Click the Parameters button next to each report in the report group and enter the report parameters.

After entering each report's parameters, press Enter to return to the Report Parameters form.

For practice, click the Parameters button next to the 1G-RPT Birthday Listing. Type today's date in the As of Date text box.

If you completed the Guided Practice, the resulting form should look similar to the example that follows:



8. Click Save or press Enter

After the last parameter is entered and you have pressed Enter to return to the Report Parameters form, press Enter again to return to the Report Group Activities form (RGMSTR).

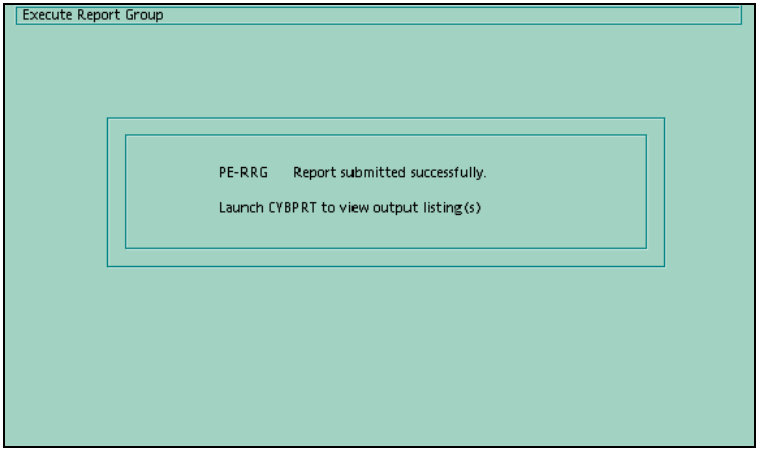
For practice, press Enter to return to the Report Group Activities form (RGMSTR).

9. Click Execute

Click the Execute button to launch the report.

For practice, click Execute.

If you completed the Guided Practice, the resulting confirmation form should look similar to the example that follows:



Launching a report group from the Navigator

To launch a report group from the Navigator, complete the following steps:

Note: *Other than Step 1, these detailed directions may also be used to launch a report from the menu.*

Note: *In a classroom setting, each student must have a unique User Code, Password, and Operator ID, and user folder to successfully complete the Guided Practice for this task.*

1. Access the report group from the Navigator

Access the report group by making the following selections from the Navigator:

Component: Reporting
Process: any selected report group category
Task: any selected report group

The Parameters Selection form is displayed.

For practice, select the HRMS process and then access the Office Telephone Directory report group (1C-RRG).

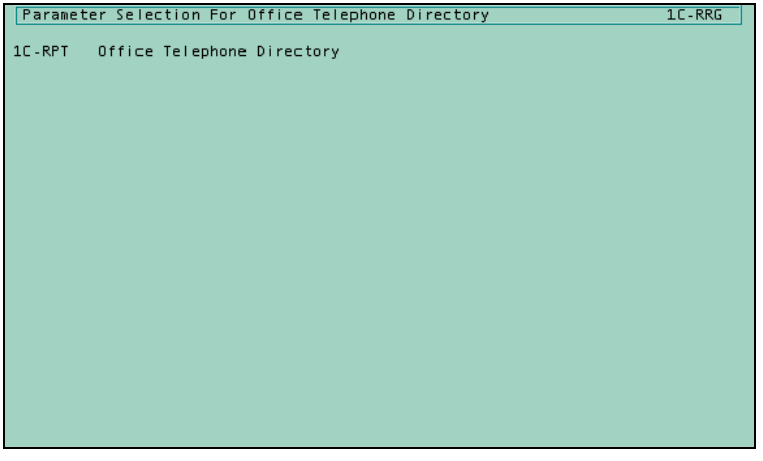
2. Click Parameters

Click the Parameters button next to each report in the report group and enter the report parameters.

After entering each report's parameters, press Enter to return to the Report Parameters form.

For practice, make no entries because there are no parameters required for this report.

If you completed the Guided Practice, the resulting form should look similar to the example that follows:



3. Click Save or press Enter

After the last parameter is entered and you are viewing the Report Parameters form, press Enter to save the form and access the Limit Companies form.

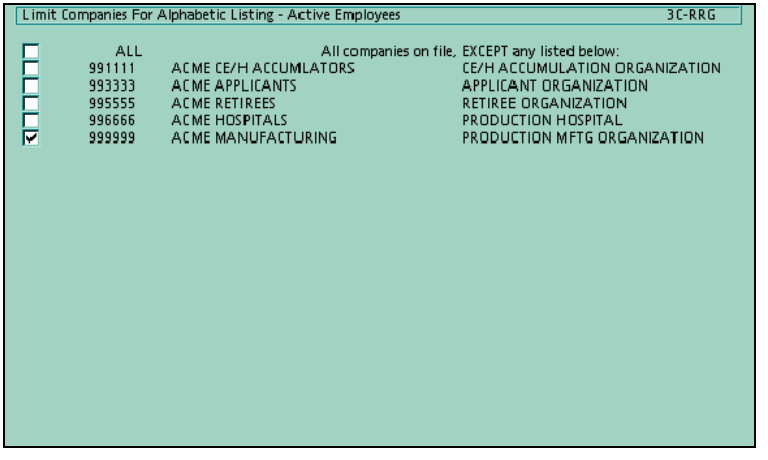
For practice, press Enter.

4. Select the organizations to be included in the report

The Limit Companies form is automatically displayed. Select the check box next to each organization for which you want to run the report.

For practice, select the '999999 ACME MANUFACTURING' organization.

If you completed the Guided Practice, the resulting form should look similar to the example that follows:



5. Click Save or press Enter

Click Save or press Enter to save the form and access the Execute Report Group form.

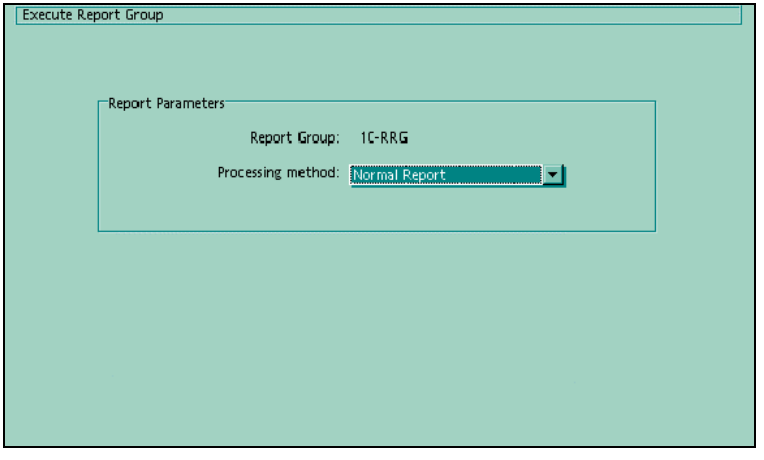
For practice, press Enter.

6. Execute the report group

The Execute Report Group form is automatically displayed. Select either Normal, Consolidated, or Rollup report processing.

For practice, select 'Normal Report'.

If you completed the Guided Practice, the resulting form should look similar to the example that follows:

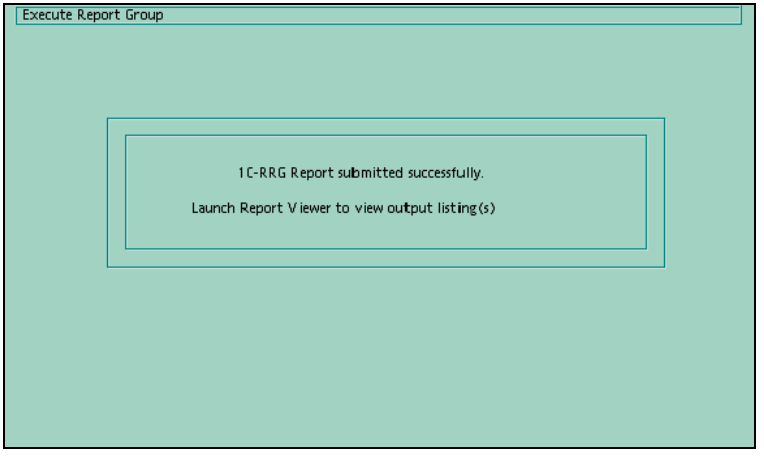


7. Press Enter

Press Enter to launch the report online.

For practice, press Enter.

If you completed the Guided Practice, the resulting confirmation form should look similar to the example that follows:



Viewing a held report online

The View Held Report (VIEW) program allows you to view, print, and/or delete the batch reports and queries routed for online viewing from the Batch Job Initiation Menu process.

The displayed list is for your operator ID only.

1. Access the View Held Reports form

Access this form by selecting:

Component:  Reporting
Process: Report Scheduling
Task:  View Held Report

The View Held Report form is displayed.

You must have a held output file to view. If you do not, you will see the message: 'YOU DO NOT HAVE ANY HELD PRINT FILES'.

2. Specify the action to take

Enter a 'D' (Delete), 'P' (Print), or 'V' (View).

3. Enter the ID of the report to work with

The ID of the report will be listed on the form.

4. Press Enter

The system displays the appropriate form. For our example, the first page of the report will be displayed.

See also:

- Online report initiation and viewing ***(on page 287)***

To learn more about viewing reports and queries online.

Review of Questions answered

1. What is the role of the system administrator in reporting?

2. What control structures need to be set up to administer reporting?

3. What is the flow of the batch report process?

4. What facilities are available for initiating and viewing reports and batch queries online?

5. What are consolidated and roll up reporting?

CHAPTER 14

Managing Working Storage

In This Chapter

Introduction

This section provides you with the information you need to manage the working storage requirements of The Solution Series.

The Solution Series programs are delivered with the maximum amounts of working storage. You may find you can decrease these amounts to decrease program sizes. However, you need to ensure that you have adequate amounts of working storage.

Having inadequate amounts of working storage to process your organization's data can result in the abnormal termination of The Solution Series and Payroll Processing programs.

As the amount of information you keep on individuals and companies increases, the larger their logical master records will be. Consequently, you may need to increase the working storage areas of CBSV and associated payroll COBOL programs to accommodate these larger record sizes.

Similarly, you may need to increase data areas of Payroll Processing programs to accommodate batch and online reporting areas.

Relational database customers may need to modify the default storage amounts for keys, update tables, and user tables.

Tasks

You must complete the following tasks to manage working storage:

- Determine if expansion of working storage is required for the online system employee and company areas.
- Determine if expansion of working storage is required for the Payroll Processing COBOL programs.
- Expand working storage for the online system employee and company areas.
- Expand working storage for The Solution Series Payroll Processing COBOL programs.
- Expand working storage for relational databases.

Questions answered in this section

This section answers the following questions:

1. What is the recommended approach for managing working storage?
2. When should you check your working storage resources?
3. What are The Solution Series areas that can be expanded?
4. What are the Payroll Processing areas that can be expanded?
5. How much working storage is delivered with the system?
6. What areas should relational database customers consider expanding?
7. Where do you find the size of working storage areas?
8. How do you expand The Solution Series and Payroll Processing working storage areas?
9. How do you extract COBOL source programs for The Solution Series and for Payroll Processing?

A recommended approach to managing working storage areas

Taking a proactive approach to managing working storage areas means periodically monitoring their sizes and, if necessary, increasing them to accommodate the current data requirements of your organization.

By doing so, you will avoid having to respond to out-of-space error messages such as 'RECORD TOO LARGE' in The Solution Series or 'EMPLOYEE AREA FULL-BYPASSED' from the Payroll Process Audit Trail report.

When to check working storage resources

In addition to periodic checks, you should check working storage resources in the following situations:

- Before a data load
- Before benefits enrollment
- Before implementing a new Cyborg application module

Working storage expansion areas

There are three categories of areas that can be expanded:

- Working storage areas that affect both the online system and Payroll Processing COBOL programs.
- Working storage areas that affect only Payroll Processing COBOL programs.
- Additional working storage areas that affect only relational database users.

A discussion of each of these categories follows.

Working storage areas affecting both the online system and Payroll Processing

A discussion of these topics follows:

- The Solution Series CBSV working storage areas
- Payroll expansion areas affected by the online system work areas

CBSV working storage areas

There are four main areas (01 levels) defined in working storage for both CBSVO and CBSVB. The data dictionary uses the pointers in these areas to map where data resides within the program's memory.

AREA1 Pointer Table Time Entries Form (data to terminal/monitor) I/O buffer 'Other' records	AREA2 Work (data from terminal/monitor) Tax Master Record Employee Master Record
AREA3 Cyborg Scripting (English) Language Object Code Report Extract	AREA4 Company Master Record

The two areas that you may have to expand are Area2 and Area4.

Area2 is used for Employee Master record information. This area must be large enough to accommodate the largest Employee Master record.

Area4 is used for Company Master record information. This area must be large enough to accommodate the largest Company Master record.

These record sizes are shown on the FILE02 Records (RECSIZ) report.

A sample of this report is shown below:

```
                    FILE02 RECORDS REPORT
LARGEST EMPLOYEE RECORD:        999999      1975            10,541
MAXIMUM EMPLOYEE RECORD:                                    24,957
LARGEST COMPANY RECORD:         999999                      12,312
MAXIMUM COMPANY RECORD:                                     32,721
```

To determine whether expansion is required or not, you will need to complete the Employee Area Expansion and Company Area Expansion worksheets.

☞ *Refer to* **Working Storage Expansion Worksheets** *(on page 393) for copies of these worksheets.*

Payroll expansion areas affected by the online system work areas

The following table shows the payroll expansion areas that must be expanded when their counterparts in CBSV are expanded:

When you expand this CBSV area	Expand this area of P4CALC/O4CALC
Employee (Area2)	EMPLOYEE
Company (Area4)	PAYER

'Payroll-only' expansion areas

The following table describes the areas of the Payroll Processing system that can be expanded:

Area	Program(s)	Use
RPT20	P2EDIT/O4CALC	Transaction/Organization Inclusion List
REPORT BATCH	P4CALC	Loaded Report Generator Logic
REPORT ONLINE	O4CALC	5H5Z and Method Code Generators
PAYER	P4CALC/O4CALC	Company information
TAX	P4CALC	Tax Specification Data
EMPLOYEE	P4CALC/O4CALC	Employee Information
AREAW	P4CALC	WL Data

You should expand these areas under the following conditions:

- Expand any P4CALC area that has less than 2000 positions left as shown on the Payroll Audit Trail report.
- Expand the RPT20 area, if you intend to have more than 50 entries (Organization Control Number values) in the System Generator R.RPT20.
- You should expand the REPORT ONLINE area if the amount shown by program DSP02 is less the delivered size for this area.

☞ *Refer to the Payroll Technical guide for more information.*

Working storage delivered with the system

The system is delivered with maximized working storage areas.

The following documents these working storage amounts/sizes:

Area	Delivered size
Employee (Area2)	24, 958
Company (Area4)	32,192

Delivered size of the REPORT ONLINE area

The platform on which you are running the system determines the size of the delivered REPORT ONLINE area. This represents the combined lengths of SRT5G, SRT5H, and RPT5Z.

The following chart lists platforms and delivered area size:

4-Byte Platforms 7500 Bytes
PC
UNIX

Relational database work areas

The following default sizes and maximums are used for relational objects:

Object	Description	Delivered size
Keys	Stores key information	11250 bytes
Individual record segments	Stores record segment keys	750 allowed
User-defined segments	Number of user-defined segments allowed during index creation	99 allowed

Error messages

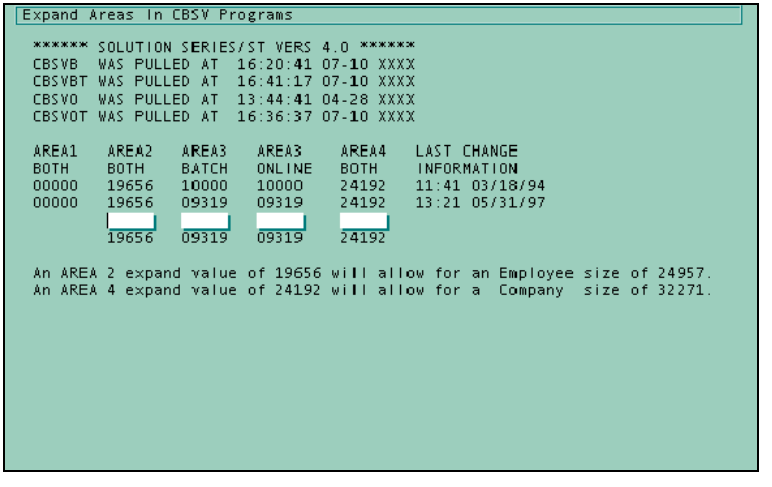
Following are the error messages associated with overflows of the relational database work areas:

Message	Explanation	Recommended action
KEY OVERFLOW	The system allows 11250 bytes to store key information. This maximum has been exceeded.	Increase the size of REL-AREA3 and REL-AREA4, and the maximum working-storage limit for keys.
UPDATE TABLE OVERFLOW	The system allows 750 segments on any individual record. This maximum has been exceeded.	Increase the update table area and the maximum working-storage limit for updates.
USER TABLE OVERFLOW	The system allows 9 user-defined segments during index recreation process. More than 99 user tables are present.	Increase the user table area.

Expansion of the online system COBOL working storage areas

You use the Expand Areas in CBSV Programs form to enter expansion figures for the online system COBOL working storage areas.

The values entered will be the total size needed for that area including the expansion amount.



Expansion of Payroll Processing COBOL working storage areas

You enter EXPAND transactions on the P05RDR override file to expand the Payroll Processing COBOL working storage areas.

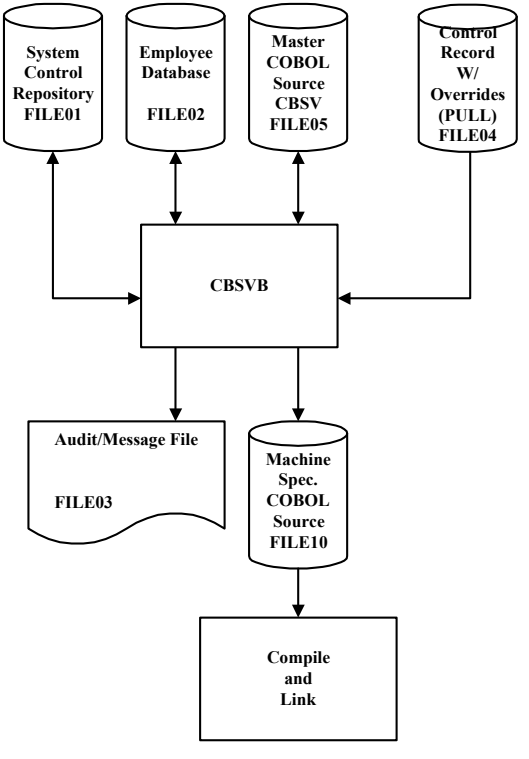
Extraction of the online system COBOL programs

Source code for the online system COBOL programs is stored in the CBSV source file.

You extract these programs from this file using the COBOL Extract (PULL) process.

Once extracted, these programs must be compiled and linked using your standard processes.

The following figure shows the flow for extracting these programs:



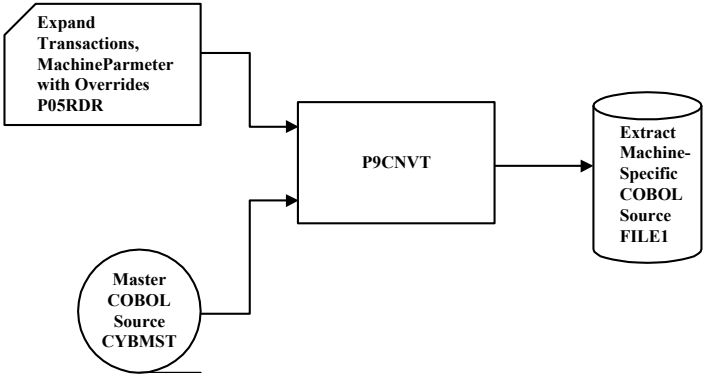
Extraction of Payroll Process COBOL programs

Source code for the Payroll Process COBOL programs is stored in the member C.P0PRGM in CYBMST.

You extract these programs from this file using the P9CNVT program.

Once extracted, these programs must be compiled and linked using your standard processes.

The following figure shows the flow for extracting these programs:



You use the Machine Parameter record in the P05RDR input file to identify the program to extract from CYBMST.

☞ *Refer to the Payroll Technical guide for more information about P9CNVT.*

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Determining if expansion is required for employee and company areas

The following provides detailed instructions for the tasks relating to managing working storage as summarized in the previous section:

1. Identify largest employee and company records

To identify the largest employee and company records on the database, you use the RECSIZ report.

To generate this report, you run CBSVB as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03	FILE02 Record Size (RECSIZ) Report
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	RECSIZ	Name of the program
31–36	DETAIL or blank	Blank to show only the largest company and employee record lengths

You will use the numbers on the output report on the worksheets for determining whether expansion is required, and if so, what the expansion amounts should be.

☞ *Refer* **Working Storage Expansion Worksheets** *(on page 393) for blank worksheets and to* **Report Quick Reference** *(on page 481) for detailed information about the FILE02 (Employee Database) Record Size report.*

2. Determine amount of expansion required

Complete Step 1 of the Employee Area Expansion and Company Area Expansion worksheets to determine the amount of expansion required.

In Step 1 of the worksheets, you:

- Calculate the positions left in working storage for the records.
- Calculate the record/segment growth size for the next 6 to 12 months.
- Calculate the estimated storage requirement.
- Compare the estimated storage requirement to the positions left.

If you determine that expansion is required, you should complete Task 2: Expanding employee (Area2) and/or company (Area4) work areas.

See also:

- When to check working storage resources ***(on page 314)***

To learn what circumstances working storage resources should be checked.

Expanding employee (Area2) and/or company (Area4) work areas

1. Calculate the expansion amounts

Complete Step 2 of the Employee Area Expansion and the Company Area Expansion worksheets to calculate the employee area expand amount and the company area expand amount for The Solution Series and the Payroll Process.

In Step 2 of the worksheets, you:

- Calculate The Solution Series working storage requirement
- Calculate the expand area requirement
- Calculate The Solution Series expand amount
- Compare the Payroll Process expand amount

2. Expand the online system work areas

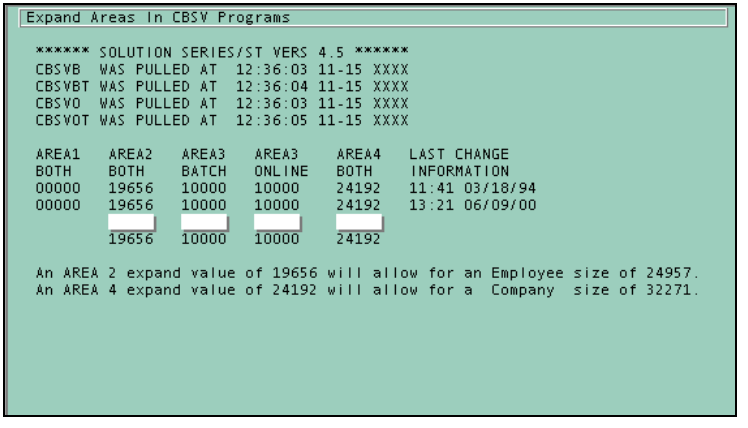
Complete Step 3 of the Employee Area Expansion and the Company Area Expansion worksheets.

1. Access the Expand Areas in CBSV Programs form.

You access this form by selecting:

Component:		Development Tools
Process:		System Operations
Task:		Expand Program Memory

The Expand Areas in CBSV Programs form is displayed:



2. Enter the total expanded amount for the employee in AREA2-BOTH.
3. Enter the total expanded amount for the company in AREA4-BOTH.
4. Press Enter.

3. Extract the COBOL programs to include the new AREA2-BOTH and AREA4-BOTH values

Extract CBSVO, CBSVOT, CBSVB, and CBSVBT using PULL.

Each program must be pulled separately.

To extract these programs, you run CBSVB as follows:

INPUT	FILE01 FILE02 FILE04 FILE05	System Control Repository Employee Database Control Record File Master CBSV Source File
OUTPUT	FILE03 FILE10	Audit/Message File Extracted CBSV Source Code
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	PULL	Name of the program.
29	5	
30	M	Optional override COBOL code.
31–37	CBSVO. CBSVOT. CBSVB. CBSVBT.	Name of program to execute followed by a period (full stop).

In these positions	Enter	Description
38–40	Op. sys. code	Refer to the appendices for a list of these codes.
41–47	Additional key	Optional. A COBOL Program—ID to override the ID. It must end in a period.
49	1, 2, or 4	Optional. 1 = FILE23 2 = FILE24 4 = FILE25 You can add these codes together to indicate various file combinations.

4. Expand the Payroll Process work areas

Create an override file containing the Expand transactions.

An EXPAND transaction has the following syntax:

In these positions	Enter	Description
1–6	EXPAND	
8–23	EMPLOYEE or PAYER	Name of area to expand
25–29	nnnnn	Number of characters the area should be changed by or the number of additional occurrences for reports
30	–	De-expand switch

To increase the EMPLOYEE area, use the figure from the Employee Area Expand worksheet.

To increase the PAYER area, use the figure from the Company Area Expand worksheet.

For example, the following EXPAND transactions are set to increase the EMPLOYEE area by 8000 positions and to increase the PAYER area by 799 positions:

```
         1         2         3         4         5         6
123456789023456789012345678902345678902345678902345678902345678 9
04CALC     LI45VSEPCYd  24     VAX-11.
EXPAND EMPLOYEE        08000
EXPAND PAYER           00799
```

Note: P9CNVT recalculates expansion amounts.

5. Extract the Payroll Process COBOL programs to include the EXPAND transactions

Use P9CNVT to extract P4CALC and O4CALC programs from CYBMST.

All source code for P4CALC and O4CALC is included in the member C.P0PRGM of CYBMST.

Only one program can be extracted from CYBMST during each execution of P9CNVT.

6. Compile and link the online system and Payroll Process COBOL programs

For the online system, compile and link CBSVO, CBSVOT, CBSVB, and CBSVBT.

Use the FILE10 output from the PULL execution as input to the compile and link processes.

For the Payroll Process, compile and link P4CALC and O4CALC.

Use the FILE1 output from the P9CNVT execution as input to the compile and load process.

7. Delete the AREA size record

To do this, run the DEL-ZX program.

You run this program in batch as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03	Audit/Message File
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	DEL-ZX	Name of the program

This program deletes the ZXCYB88W record for the PC-LAN version of The Solution Series or the ZXCYB88M record for all non-PC platforms.

A new record, ZXCYB88W or ZXCYB88M as appropriate, will be created on the Employee Database the next time the COBOL programs are executed.

See also:

- Working storage areas affecting both the online system and Payroll Processing ***(on page 316)***

To learn more about the areas of working storage which may need to be expanded.

Expanding working storage areas for relational databases

To expand storage for keys, update segment tables, and user-defined segments, follow these steps:

1. Calculate the expansion figure(s)

Based on your needs, calculate the expansion figures.

2. Modify the appropriate storage amounts in the override dataset

Enter the override COBOL code into FILE04, as follows:

For key storage, modify the values of REL-AREA3, REL-AREA4, and RELMAX.

```
         1         2         3         4         5         6
12345678901234567890123456789012345678901234567890123456789012345678901234567890
B143100+R   05  REL-AREA3                PIC X(11252).
B143150+R   05  REL-AREA4                PIC X(11252).
B152300+R   05  RELMAX           PIC S9(9)   COMP VALUE +11250.
```

For update segment tables, modify the values of SEGMAX and the associated OCCURS clauses.

```
         1         2         3         4         5         6
12345678901234567890123456789012345678901234567890123456789012345678901234567890
B148400+R           OCCURS 750 TIMES INDEXED BY UX1, UX2, UX3
B148800+R           OCCURS 750 TIMES INDEXED BY UX21.
B149050+R           OCCURS 750 TIMES INDEXED BY UX41.
B152350+R   05 SEGMAX            PIC S9(4)  COMP VALUE +750.
```

For user-defined segments, modify the values of USRMAX and the associated OCCURS clause.

```
         1         2         3         4         5         6
12345678901234567890123456789012345678901234567890123456789012345678901234567890
B152200+R   05 USER-TABLE        PIC X(4)  OCCURS 100 TIMES INDEXED BY UT1.
B152400+R   05 USRMAX            PIC S9(4)   COMP  VALUE +99.
```

Note: Verify that these are the correct sequence numbers for the data items by reviewing the FILE03 audit and compile listings.

3. Extract the online system COBOL programs to include the new key storage amounts

Extract CBSVO, CBSVOT, CBSVB, and CBSVBT using PULL.

Each program must be pulled separately.

To extract these programs, you run CBSVB as follows:

INPUT	FILE01 FILE02 FILE04 FILE05	System Control Repository Employee Database Control Record File Master CBSV Source File
OUTPUT	FILE03 FILE10	Audit/Message File Extracted CBSV Source Code
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	PULL	Name of the program.
29	5	

In these positions	Enter	Description
30	M	Optional override COBOL code.
31–37	CBSVO. CBSVOT. CBSVB. CBSVBT.	Name of program to execute followed by a period (full stop).
38–40	Op. sys. code	Refer to the appendices for a list of these codes.
41–47	Additional key	Optional. A COBOL Program-ID to override the ID. It must end in a period.
49	1, 2, or 4	Optional. 1 = FILE23 2 = FILE24 4 = FILE25 You can add these codes together to indicate various file combinations.

4. Compile and link the online system CBSV COBOL programs

For the online system, compile and link CBSVO, CBSVOT, CBSVB, and CBSVBT.

Use the FILE10 output from the PULL process as input to the compile and link processes.

See also:

- Relational database work areas ***(on page 320)***

To learn about working storage issues unique to relational databases.

Determining if expansion is required for 'Payroll-only' areas

When determining if expansion is required for 'Payroll-only' areas, you will need to examine the following areas:

- P4CALC
- REPT20
- REPORT ONLINE

Following are specific directions for examining each of these areas.

P4CALC program areas

1. Run the Payroll Audit Trail (0101) report

2. Determine if expansion is required

If the POSITIONS LEFT value for any of the expandable areas is less than 2000, expand that area.

RPT20

1. Review the System Generator R.RPT20

2. Determine if expansion is required

If you plan on exceeding the delivered maximum of 50 entries for Organization Control Number value validation, expand this area.

REPORT ONLINE area

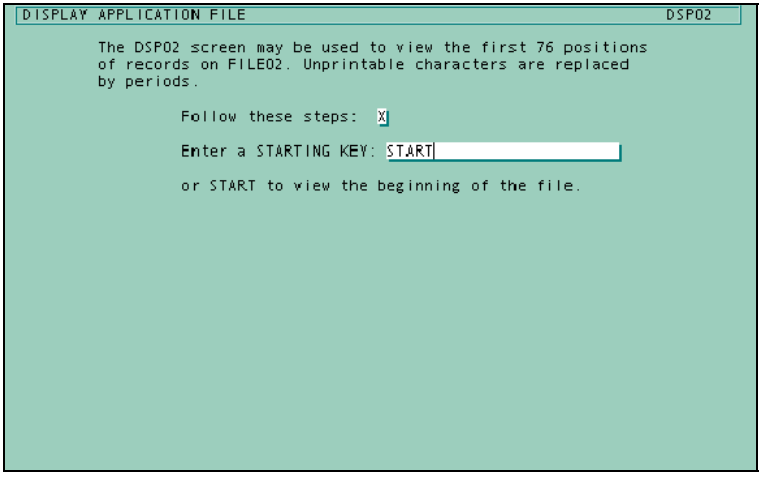
1. Execute the List Employee Database Records utility (DSP02)

You execute this utility by selecting:

Component: Development Tools
Process: Employee Database Utilities
Task: List Employee Database Records

The Display Application File form is displayed.

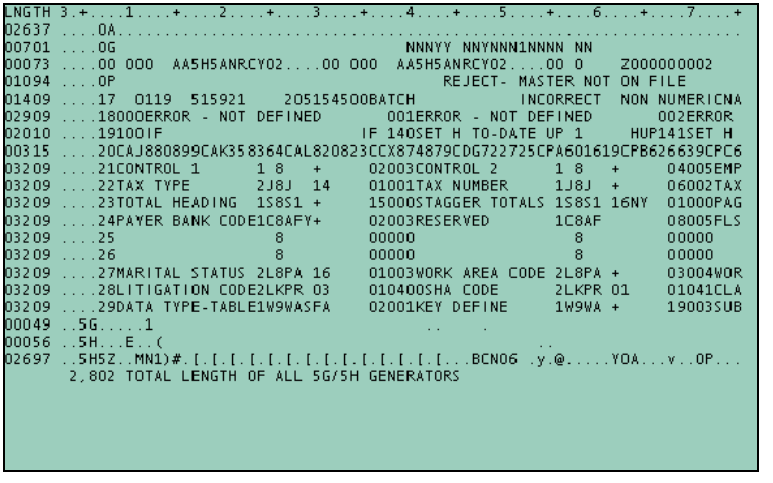
2. Enter a key value of START



3. Press Enter

The system displays the report generators on the Employee Database.

In the following figure, the total length of all 5G/5H generators is 2,802:



4. Determine if expansion is required

Verify that the size of the REPORT ONLINE area is at least the default size.

☞ *Refer to the Payroll Technical guide for further information.*

See also:

- 'Payroll-only' expansion areas ***(see "'Payroll-only' expansion areas" on page 318)***

To learn what the expansion issues are limited to Payroll Processing.

- Working storage delivered with the system ***(on page 319)***

For information on the size or the REPORT ONLINE area for your platform.

Expanding 'Payroll-only' areas

1. Enter an EXPAND transaction

Enter the EXPAND transaction immediately following the Machine Parameter transaction in the P05RDR input override file.

The EXPAND transaction has the following syntax:

In these positions	Enter	Description
1–6	EXPAND	
8–23	area-name	Name of area to expand.
25–29	nnnnn	Number of characters the area should be changed by or the number of additional occurrences for reports.

In these positions	Enter	Description
30	blank or '-'	Use blank for expand. Use '-' to de-expand.

Refer to the following table for area names:

Area	Programs
RPT20	P2EDIT/O4CALC
REPORT BATCH	P4CALC
REPORT ONLINE	O4CALC
TAX	P4CALC
AREAW	P4CALC

If you are forced to make an area smaller, due to compiler restrictions, place a minus sign in position 30 to subtract the amount from the delivered size.

2. Extract the program associated with the area

Execute P9CNVT, using P05RDR as input.

3. Keep the EXPAND transaction(s) with your control language

You can expand as many areas as needed.

You can enter EXPAND transactions in any sequence.

In its diagnostic report, P9CNVT will identify the original record as 'ORIG' and the changed version as 'EXPAND'.

See also:

- *'*Payroll-only' expansion areas ***(see "'Payroll-only' expansion areas" on page 318)***

To learn what the expansion issues are limited to Payroll Processing.

Review of Questions Answered

1. What is the recommended approach for managing working storage?

2. When should you check your working storage resources?

3. What are The Solution Series areas that can be expanded?

4. What are the Payroll Processing areas that can be expanded?

5. How much working storage is delivered with the system?

6. What areas should relational database customers consider expanding?

7. Where do you find the size of working storage areas?

8. How do you expand The Solution Series and Payroll Processing working storage areas?

9. How do you extract COBOL source programs for The Solution Series and for Payroll Processing?

CHAPTER 15

Synchronizing Relational Tables and Indexes

In This Chapter

Introduction

This section is only applicable to users of the relational version of The Solution Series.

This section explains how to ensure that the processing objects from the System Control Repository and the Employee Database are synchronized with their associated relational tables.

Tasks

You must complete the following tasks to synchronize relational database tables and indexes:

- Synchronize the System Control Repository and the relational tables by running Build/Rebuild Control File Relational Tables (POPF01).
- Rebuild all or selected organization Employee Database index records by running INDEXS.
- Rebuild individual Employee Database index records by running FIXIDX.

Questions answered in this section

This section answers the following questions:

1. How is the System Control Repository organized in the relational version and why is synchronization important?
2. What program is used to synchronize the System Control Repository and the relational tables?
3. How is the Employee Database organized in the relational version and why is synchronization important?
4. What programs are available to synchronize the Employee Database, the index table, and the relational tables?

The System Control Repository in the relational version

You will find information on these topics in the following sections:

- System control repository replication
- Impact on processing
- Synchronization of the System Control Repository and relational tables

System Control Repository replication

All option lists, certain application tables, and position control records stored in the System Control Repository are replicated in relational tables. This data is then available for reporting by third-party tools. For example, you can include both an option list code and its value on a report.

Impact on processing

The Solution Series programs (for example, CBSV) use the System Control Repository as input, and assume that it is current.

Synchronization of the System Control Repository and relational tables

Updates to the System Control Repository are reflected in the appropriate relational tables. However, should a synchronization problem occur, you use the Build/Rebuild Control File Relational Tables (POPF01) program to synchronize the System Control Repository and its associated relational tables.

Synchronization error messages

Following are potential error messages that indicate a synchronization problem between the System Control Repository and the relational database tables:

Message	Explanation	Recommended action
SC01D50R: FILE01 Delete bypassed, No RDBMS View Name	The Table record(s) could not be deleted from the System Control Repository or the RDBMS since no RDBMS View Name exists for this table.	Add an entry into the Relational Table Name Elements (VIEWNM) form for this table record(s), run the CASE tool, compile the subroutines RDBPGMA-G, link them to CBSVB/ CBSVO, and retry your entry.
SC01D53R: FILE01 Delete bypassed, RDBMS delete failed	The Table record(s) could not be deleted from the System Control Repository since no corresponding row in the relational database table existed for this entry.	Run the Resynchronize the System Control Repository and relational tables (POPF01) program.
SC01T50R: FILE01 Rewrite bypassed, No RDBMS View Name	The Table record(s) could not be updated on the System Control Repository or the RDBMS since no RDBMS View Name exists for this table.	Add an entry into the Relational Table Name Elements (VIEWNM) form for this table record(s), run the CASE tool, compile the subroutines RDBPGMA-G, link them to CBSVB/ CBSVO, and retry your entry.
SC01T53R: FILE01 Rewrite bypassed, RDBMS update failed	The Table record(s) could not be updated on the System Control Repository since no corresponding row in the relational database table existed for this entry.	Run the Resynchronize the System Control Repository and relational tables (POPF01) program.
SC01W50R: FILE01 Write bypassed, No RDBMS View Name	The Table record(s) could not be created on the System Control Repository or the RDBMS since no RDBMS View Name exists for this table.	Add an entry into the Relational Table Name Elements (VIEWNM) form for this table record(s), run the CASE tool, compile the subroutines RDBPGMA-G, link them to CBSVB/ CBSVO, and retry your entry.
SC01W52R: FILE01 Write bypassed, RDBMS insert failed	The Table record(s) could not be created on the System Control Repository since a corresponding row in the relational database table existed for this entry, but no entry existed in the System Control Repository.	Run the Resynchronize the System Control Repository and relational tables (POPF01) program.

Message	Explanation	Recommended action
SC01G50R: FILE01 Delete OK, RDBMS Del fail, No RDBMS View Name	The Table record(s) has been deleted from the System Control Repository. However, the corresponding rows in the relational database table could not be deleted since no RDBMS View Name exists for this table.	Two tasks must be performed to correct this problem: 1. Add an entry into the Relational Table Name Elements (VIEWNM) form for this table record(s). 2. Run the Resynchronize the System Control Repository and relational tables (POPF01) program.
SC01G53R: FILE01 Delete OK, RDBMS delete failed	The Table record(s) has been deleted from the System Control Repository. However, the corresponding rows in the relational database did not exist, and therefore could not be deleted.	Run the Resynchronize the System Control Repository and relational tables (POPF01) program.

The Employee Database in the relational version

In the relational version of The Solution Series, company and employee data are stored in relational database tables. Each Cyborg segment equates to a relational table.

The following table summarizes the relationship between the Employee Database and the relational database tables:

This component	Is stored
Organization Level 1, Organization Level 2, and Employee Number	Stored in the Employee Database.
Index (secondary key)	Stored in a relational database table. Provides a cross-reference to the tables where the actual data resides.
Employee and company data	Stored in relational database tables.

Impact on processing

The Solution Series programs (for example, CBSV) use the Data Manipulation Language (DML) SQL subroutines (RDBPGMA-G) to manipulate the data stored in the relational tables.

Database recovery and index rebuilds

If you need to rebuild the database indexes for the Employee Database, two programs are provided. They are described in the following table:

Program	Description	Run in
INDEXS	Fixes all index records. This program can be run for all or selected organizations.	Batch
FIXIDX	Fixes a particular record index.	Online (recommended) Batch

Note: *Running INDEXS for all organizations can be time consuming. We encourage you to break up this task for selected organizations.*

Make sure users are not accessing the data being restored. INDEXS requires a larger time window and is more disruptive to user processing than FIXIDX.

Data manipulation errors

This section lists and explains information messages that may be encountered using the relational version of the system. No user action is required.

ZE records

Informational error messages encountered during execution of DML statements by CBSV programs are written to ZE records on the System Control Repository.

The error messages are reported and deleted using ZE-PRT.

The layout of the ZE record is as follows:

Columns	Contents
01–02	ZE
03–22	Organization Control Number (Control 1-2), Employee Number, Labor/History Number
23–24	Sequence Number
25–38	Time and Date
40–43	User Code
46–51	Program/Screen Name
52–55	Table Name
56–61	SQLCODE
62–74	Segment Key

Specific error codes

INDEX ERROR CORRECTED ON TABLE....
This message is issued if the index record indicates that a specific row exists on the database, but the SQL SELECT results in a non-zero SQLCODE (Row not found).

No user action is required.

The pointer is removed from the Employee Database and it is automatically corrected to reflect actual database information. It corrects the fault cross-reference index.

The following audit record is written to the System Control Repository:

```
1...5...10...15...20...25...30...35...40...45...50...55...60...65...70..
ZE9999991001          0015:30:14 09-01 XXXX  PAYXTRMLZC 00100215D17001

COL 01-02:  ZE
COL 03-22:  CONTROL 1-2, EMPLOYEE NUMBER, LABOR/HISTORY NUMBER
COL 23-24:  SEQUENCE NUMBER
COL 25-38:  TIME & DATE
COL 40-43:  USER CODE
COL 46-51:  PROGRAM/SCREEN NAME
COL 52-55:  TABLE NAME
COL 56-61:  SQLCODE
COL 62-74:  SEGMENT KEY
```

RECORD NOT FOUND ON TABLE....
This message is issued if the Employee Database indicates that a record exists on the database, but the SQL SELECT for the first segment of that record results in a non-zero SQLCODE (Row not found).

No user action is required.

The Employee Database is automatically corrected to reflect database information.

The following audit record is written to the System Control Repository:

```
1...5...10...15...20...25...30...35...40...45...50...55...60...65...70..
ZE9999991002          0015:30:14 09-01 XXXX  PAYXTRMLZC 00100

COL 01-02:  ZE
COL 03-22:  CONTROL 1-2, EMPLOYEE NUMBER, LABOR/HISTORY NUMBER
COL 23-24:  SEQUENCE NUMBER
COL 25-38:  TIME & DATE
COL 40-43:  USER CODE
COL 46-51:  PROGRAM/SCREEN NAME
COL 52-55:  TABLE NAME
COL 56-61:  SQLCODE
```

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Synchronizing the System Control Repository and the relational tables

To synchronize the System Control Repository and the relational tables, you run the Build/Rebuild Control File Relational Tables (POPF01) program in batch as follows:

Note: Running Build/Rebuild Control File Relational Tables (POPF01) online is possible, but not recommended, as it can be a very time-consuming process.

1. Verify that the System Control Repository is current

Because the System Control Repository is used to rebuild the relational tables, you should verify that the file you use as input is current.

2. Run POPF01

You run this program in batch as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03	Audit/Message File
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	POPF01	program name

3. Check the output

A successful run will produce a 'COMPLETED' message in FILE03.

See also:

- The System Control Repository in the relational version ***(on page 339)***

To learn how the System Control Repository functions in a relational environment.

Rebuilding all Employee Database index records

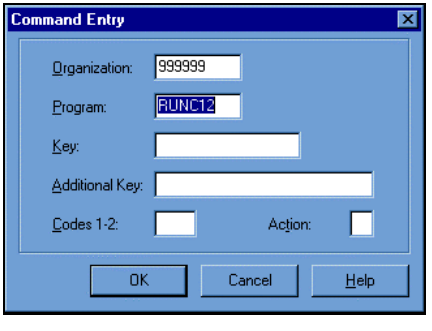
To rebuild all Employee Database index records, you run the INDEXS program in batch as follows:

1. (Optional) Specify organizations

Set up an organization inclusion list to indicate which organizations to include in the rebuild.

To set up an organization inclusion list, do the following.

1. Access the Command Entry dialog box.
   To access this dialog box from the menus, select:
   Actions Enter Co**m**mand
2. Enter 'RUNC12' as the program name.



3. Click OK or press Enter. The first panel of the Report Company Schedule (RUNC12) form displays.
4. Type the organization inclusion list name in the Schedule Name text box. The name you enter here will also be entered in the control record on FILE04.
5. Save the form. The second panel of the Report Company Schedule (RUNC12) form displays.
6. Type 'A' in the A/D text box and the number of the organization you want to include in the rebuild in the Company ID entry box. Repeat this to include other organizations in the rebuild.
7. Save the form.

2. Run INDEXS

You run this program in batch as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03	Audit/Message File
EXECUTE	CBSVB	

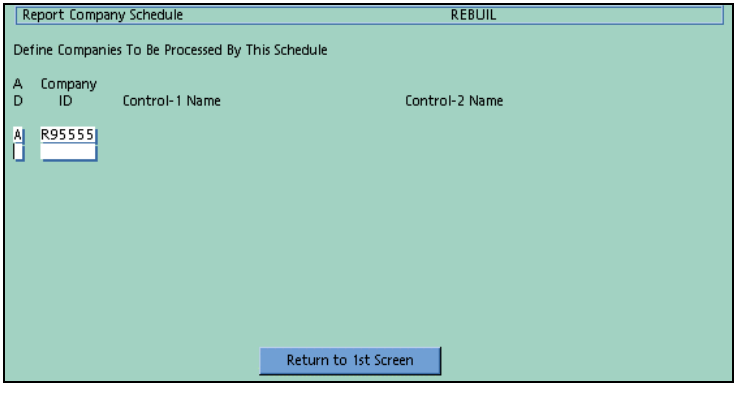
The control record on FILE04 has the following syntax:

In these positions	Enter	Description
23–28	INDEXS	Name of the program
31–36	blank or organization inclusion list name	If blank, the index records for all organizations will be rebuilt

For example, to rebuild the index records for all organizations, the control record would look like this:

```
         1         2         3         4         5
12345678901234567890123456789012345678901234567890123456789
                      INDEXS
```

To rebuild the index records for organization R95555, the Report Company Schedule form would look similar to this:



To rebuild the index records for organization R95555, the control record would look like this:

```
         1         2         3         4         5
12345678901234567890123456789012345678901234567890123456789
                      INDEXS  REBUIL
```

3. Check the output

The Audit/Messages file (FILE03) will contain a 'COMPLETED' message following a successful run of INDEXS.

Note: INDEXS should not be run online.

See also:

- The Employee Database in the relational version ***(on page 342)***

To learn how the Employee Database functions in a relational environment.

Rebuilding individual Employee Database index records online

To rebuild an individual index record, you run the FIXIDX program either online (recommended) or in batch as follows:

To run FIXIDX online, follow these steps:

1. Access the Command Entry dialog box

To access this dialog box from the menus, select:

Actions Enter Co**m**mand

2. Enter the FIXIDX program name

3. Specify the record whose index should be rebuilt

Enter the specific company, employee number or TX (for tax records) in the key field.

If you leave the key field blank, it rebuilds the index for the current company record.

4. Click OK or press Enter

When the program has completed, a '---Complete---' message displays.

Rebuilding individual Employee Database index records in batch

To run FIXIDX in batch, follow these steps:

1. Run FIXIDX

You run this program in batch as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03	Audit/Message File
EXECUTE	CBSVB	

The control record on FILE04 has the following syntax:

In these positions	Enter	Description
17–22	6 position organization value	Organization number
23–28	FIXIDX	program name

In these positions	Enter	Description
31–40	Employee number, TX nxxxxxx (for tax record), or blanks	The specific employee or tax number. If you leave this blank, the company record index will be rebuilt.
41–44	Master number	Particular labor or history record(s) for an employee.

For example, to rebuild the index for a company record, the control record would look like this:

```
         1         2         3         4         5
12345678901234567890123456789012345678901234567890123456789
               995555FIXIDX
```

To rebuild the index for a tax record, the control record would look like this:

```
         1         2         3         4         5
12345678901234567890123456789012345678901234567890123456789
               999999FIXIDX  TX 102
```

To rebuild the index for an employee record, the control record would look like this:

```
         1         2         3         4         5
12345678901234567890123456789012345678901234567890123456789
               999999FIXIDX  1001
```

To rebuild the index for a history and labor record, the control record would look like this:

```
         1         2         3         4         5
12345678901234567890123456789012345678901234567890123456789
               999999FIXIDX  1001      0019
```

2. Check the output

The Audit/Messages file (FILE03) will contain a 'COMPLETED' message following a successful run of FIXIDX.

See also:

- The Employee Database in the relational version ***(on page 342)***

To learn how the Employee Database functions in a relational environment.

Review of Questions answered

1. How is the System Control Repository organized in the relational version and why is synchronization important?

2. What program is used to synchronize the System Control Repository and the relational tables?

3. How is the Employee Database organized in the relational version and why is synchronization important?

4. What programs are available to synchronize the Employee Database, the index table, and the relational tables?

CHAPTER 16

Performance Tuning for Relational Databases

In This Chapter

Introduction

This section explains how relational customers can tune the performance of The Solution Series.

Relational customers can improve both the online and the batch performance of The Solution Series using the following methods:

- Converting dynamic SQL to static SQL
- Extracting only the data required for payroll processing
- Optimizing Labor and History record processing in Pay Merge

About pay extract and pay merge processing

This section addresses only specific programs used to improve pay extract and pay merge processing. It does not address payroll processing itself. For information on payroll processing, refer to the payroll documentation.

Specific relational database tuning

Particular relational database management systems will offer their own tuning techniques. For example, customers using ORACLE can often improve performance by redistributing table spaces for better I/O or increasing the size of the System Global Area (SGA).

Customers are encouraged to make use of the tuning techniques offered by their RDBMS vendors.

Tasks

You must complete the following tasks for tuning the performance of relational databases:

- Convert dynamic SQL to static SQL
- Use Extract (EXT) records to select data for payroll processing
- Optimize processing of Labor and History records
- Use Sybase's Bulk Copy Processing (BCP) feature

Questions answered in this section

This section answers the following questions:

1. What is the difference between static and dynamic SQL?
2. When is dynamic SQL generated?
3. Why is static SQL more efficient than dynamic SQL?
4. What methods are available to improve pay extract and pay merge processing run times?
5. If I want to improve pay extract and pay merge processing run times, can I still restrict the organizations in the run?

Dynamic SQL vs. static SQL

There are two occasions when running the CASE tool, RDBPGM0, is either required or optional by a user running a relational version of The Solution Series:

- You must run the CASE tool if new fields have been added via Field Maintenance And Edit form or the Change Control Facility Maintenance Input (MAINTI).
- You may choose to run the CASE tool when you want to convert dynamic SQL to static SQL.

During the installation of the relational version of The Solution Series, the CASE tool, RDBPGM0, will generate the initial Data Definition Language (DDL) and Data Manipulation Language (DML) statements to create and to access the relational database and its associated structures-tables, indexes, and views.

These DDL and DML SQL statements are embedded in application programs and called *static* SQL. Static SQL statements are interpreted and converted during precompilation of the programs.

Note: The installation process creates one physical database.

Dynamic SQL are SQL statements created by a program. These SQL statements must be interpreted and converted to executable SQL statements at run time, prior to being executed.

Since the interpretation and conversion of such statements occurs at run time, rather than during precompilation, dynamic SQL is generally less efficient than static SQL.

When dynamic SQL is generated

Dynamic SQL is generated when the New Form (NEWSCR) facility is used to create a new Cyborg segment.

WRITER (NEWSCR) calls the NEWTAB subroutine, which creates the database table and dynamic SQL for accessing the table.

Subsequent manipulation of the segment/rows created by NEWSCR will utilize dynamic SQL. This allows you to use the new form immediately, but many users prefer the more efficient static SQL.

If you require static SQL, you must drop the database, run the CASE tool, and recreate the database.

To eliminate the use of the dynamic SQL, you regenerate the SQL subroutines using the current field table (F) records and the current field table menu (RFM) records from the System Control Repository as input to the CASE tool (RDBPGM0).

Note: It is important to remember that 'FTM' is the object code that provides 'RFM' records.

Selectable table processing for Payroll

The Solution Series provides a method for improving pay extract and pay merge processing performance—selecting the data for a pay run.

All relational database users can specify the table data that will be extracted by the Pay Extract program (PAYXTR) using Extract (EXT) records.

You have three choices for how you run PAYXTR, as explained in the following table:

To	Do this
Have PAYXTR extract all table data. *Note: If you choose this option, no improvement in processing will occur.*	Use the Extract (EXT) record as delivered.
Have PAYXTR extract only the table data required for payroll processing.	Delete the delivered Extract (EXT) record.
Have PAYXTR extract only the table data required for payroll processing, plus table data you specify.	Supply an Extract (EXT) record for each table (over and above those required for Payroll processing) whose data should be extracted by PAYXTR.

Extract (EXT) records can also be used with the New Extract (NEWXTR) program.

Each of these choices is explained in more detail later in this section.

Note: You should restrict the editing of Extract records to authorized personnel.

Option 1: Use all table data

To select all table data for inclusion in payroll processing, use the Extract record as delivered. No action is required on your part.

This option means that all Payroll and Human Resource segments will be extracted; this may impede performance.

The Extract record is delivered with the following setting:

```
         1         2         3         4         5         6
123456789012345678901234567890123456789012345678901234567890123456789
EXT00ALL
```

Note: If pay extract is used to create a backup of the Employee Database, Option 1 must be used.

Option 2: Extract only required table data

To select only required table data for inclusion in payroll processing, you delete the delivered Extract record using the EDIT facility.

If you use this option, the following data will be extracted by PAYXTR:

- All company, tax, and 'other' records.
- All new history and labor created by the PAY-CP process. The matching or pre-existing history and labor records are taken from FILE11.

In addition, the following employee data tables are extracted:

- EMPLOYEE
- EMPLOYEE_PAYMT
- EMPLOYEE_TRANSFER
- NAME_ADDRESS
- PAY_ALLOCATIONS
- EMP_EARN_DED
- EMP_TAX_DED
- V80_INSURANCE
- V80_MED_COVERAGE
- V80_BENEFIT
- SALARY_CHANGE
- CAN_EMP_EQUITY
- V80_INJURY_DISABLE
- PAY_PERIOD

Performance of the Pay Extract process should be greatly improved due to selecting only the segments necessary for payroll processing.

Option 3: Extract additional specified table data

If you want to include tables in addition to those described in Option 2, you will need to use the Edit facility and supply an Extract record for every table whose data should be extracted for inclusion in payroll processing.

These tables are *in addition to* the base data extracted.

To specify additional table data to be selected, you use an EXT 00 record. For example, if you want to include the Employee Flexible Credits table, the Tuition Reimbursements table, and the Unauthorized Time Off table in the PAYXTR process, the EXT records would look like this:

```
         1         2         3         4         5         6
12345678901234567890123456789012345678901234567890123456789012345678901234567890
EXT00EMP_FLEX_CREDITS
EXT00TUITION_REIMBURSMT
EXT00UNAUTH_TIME_OFF
```

Note: *You must not change your EXT record choice between running Pay Extract (PAYXTR) and Pay Merge (PAYMRG). The EXT record must be in the same state for the pay merge process as it was for the pay extract process.*

For example, if the EXT record did not exist for the pay extract process, it should not be present for the pay merge process.

Changing the EXT record under these circumstances will lead to data integrity problems.

Organization processing

The Pay Extract (PAYXTR) process has not changed. You can still extract all or selected organizations.

If you are specifying certain organizations for processing, you must make that designation on the Selected Company Payroll Run Schedule form (PAYC12).

Regardless of extracting all or selected organizations, the appropriate entry must be made in the pay extract control record (FILE04).

Once the EXT00ALL record is removed from the System Control Repository, the selected table processing is automatically invoked when the pay extract is processed.

For example, suppose you want to include the Employee Flexible Credits table, the Tuition Reimbursements table, and the Unauthorized Time Off table in the pay extract process, but only for organization 999999. You have set up a Select Company Payroll Run Schedule form that references this control number.

The control record to select the particular organization would look like this:

```
          1         2         3         4         5         6
 12345678901234567890123456789012345678901234567890123456789012345678901234567890
                       PAYXTR  PAY999
```

The EXT records would look like this:

```
          1         2         3         4         5         6
12345678901234567890123456789012134567890123456789012345678901234567890
EXT00EMP_FLEX_CREDITS
EXT00TUITION_REIMBURSMT
EXT00UNAUTH_TIME_OFF
```

Troubleshooting

If all table data is not extracted, verify that the correct table names have been specified in the Extract records.

The EDIT facility does not edit for correct table names. Consequently, any tables with incorrect table names are excluded from the extract process.

Note: The use of pay extract processing to create a FILE02 backup will require replacing the EXT00ALL record. Without it, a partial backup will result.

Labor and History record optimization

Preventing the deletion and recreation of Labor/History records during Pay Merge drastically reduces processing time.

PAYXTR will take all key matched Labor and History records from the input P20 file (FILE11) rather than select the exact same data from the database.

CBSVB places a 'flag' in all of the existing Labor/History records it writes to FILE12 during PAYXTR. The flag is zero in field KEY_FIELD_1 through KEY_FIELD_4.

This is done to identify the pre-existing Labor and History records when they come back in after the Pay and Maintenance runs.

CBSVB identifies three categories of Labor and History records it processes during Pay Merge:

1. An unchanged 'flag' bypasses all processing other than being written to FILE12 when necessary.
2. If the 'flag' is changed by P4CALC, the fields were changed and are updated on the database.
3. Any other 'flag' value indicates new data which is added to the database.

Note: *When running Pay Merge following a Labor/History archive run or when using it to restore the Employee Database from backup, you do not want to prevent the deletion and recreation of Labor/History records.*

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Converting dynamic SQL to static SQL

To convert generated dynamic SQL Data Manipulation Language (DML) statements to static SQL, follow these steps:

1. Export the Field Name Table records

Export the first line of the F records and the RFM records by running EXPORT as follows:

INPUT	FILE01 FILE02 FILE04	System Control Repository Employee Database Control Record File
OUTPUT	FILE03 FILE10	Record count F and RFM records
EXECUTE	CBSVB	

Two control records are required, as follows:

The control record to export the F records has the following syntax:

In these positions	Enter	Description
23–28	EXPORT	Name of the program
31–32	F1	Field Entry
54	Y	Extract only the first line of each record

The control record to export the RFM records has the following syntax:

In these positions	Enter	Description
23–28	EXPORT	Name of the program
31–33	FTM	Field Table Name Menu

Note: It is important to remember that 'FTM' is the object code that provides 'RFM' records.

2. Run the CASE tool

This step produces the RDBPGM1 program with the DDL statements and the SQL subroutines (RDBPGMA-RDBPGMG) and COBOL subroutine (RDBPGMH) which contain the DML statements.

INPUT	FILEIN1 FILEIN2	Control record FILE10 from Step 1
OUTPUT	RDBPGM1 RDBPGMA-G RDBPGMH	COBOL program containing DDL statements SQL subroutines COBOL subroutine
EXECUTE	RDBPGM0	

☞ *Refer to* **Customization** *(on page 107) for the layout of the input control record on FILEIN1.*

3. Precompile and compile the DML subroutines

1. Precompile the following SQL subroutines:

- RDBPGMA
- RDBPGMB
- RDBPGMC
- RDBPGMD
- RDBPGME
- RDBPGMF
- RDBPGMG

Note: RDBPGMH is a COBOL subroutine and does not need to be precompiled.

2. Compile the following subroutines:

- RDBPGMA
- RDBPGMB
- RDBPGMC
- RDBPGMD
- RDBPGME
- RDBPGMF
- RDBPGMG
- RDBPGMH

4. Link the DML subroutines into CBSV

This step creates an executable CBSV program that contains all of the SQL needed to manipulate the data in the relational databases. This SQL resides in subroutines that are statically linked with CBSV.

If required by your environment, you must also link 04CALC into CBSVO and CBSVOT.

The database name needs to be supplied as an override to these programs.

See also:

- Dynamic SQL vs. static SQL ***(on page 353)***

To learn the benefits of converting dynamic SQL to static SQL.

Using selectable Extract (EXT) records to speed up Payroll processing

You can control what data will be used in Payroll Processing by using Extract (EXT) records.

You can use Extract (EXT) records with both the Pay Extract Program (PAYXTR) and the New Extract Program (NEWXTR).

If you do not modify the delivered Extract (EXT) record, all table data will be extracted.

Your options for using Extract (EXT) records to select what data will be included in payroll processing are as follows:

- Extract and merge only the minimal amount of data required for payroll processing
- Extract and merge the minimal amount of data required for payroll processing, plus selected table data

Option 1---Extract and merge only the required data for payroll processing

To extract and merge only the required data for payroll processing, you delete the EXT00ALL record as follows:

1. Access the Edit form

You access this form by selecting:

Component: Development Tools
Process: System Control Repository Utilities
Task: Edit Control Repository Object

The Edit Utility form is displayed.

2. Select the Extract (EXT) record

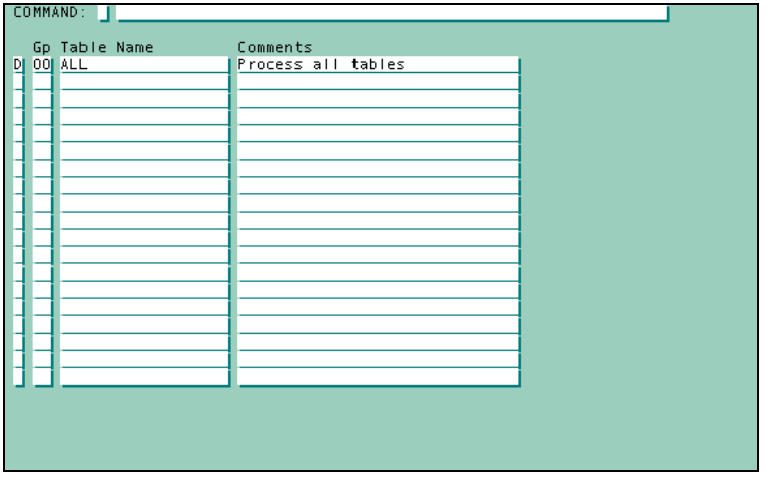
Select PAYXTR/PAYMRG Select from the Object pull-down list.

3. Press Enter

The EXT00ALL record is displayed in the Editor.

4. Delete the Extract (EXT) record

Type a 'D' in the action field next to the record.



5. Press Enter

Option 2---Extract and merge the minimal amount of data required for payroll processing, plus selected table data

To extract and merge the required data for payroll processing, plus selected table data, follow these steps:

1. Access the Edit form

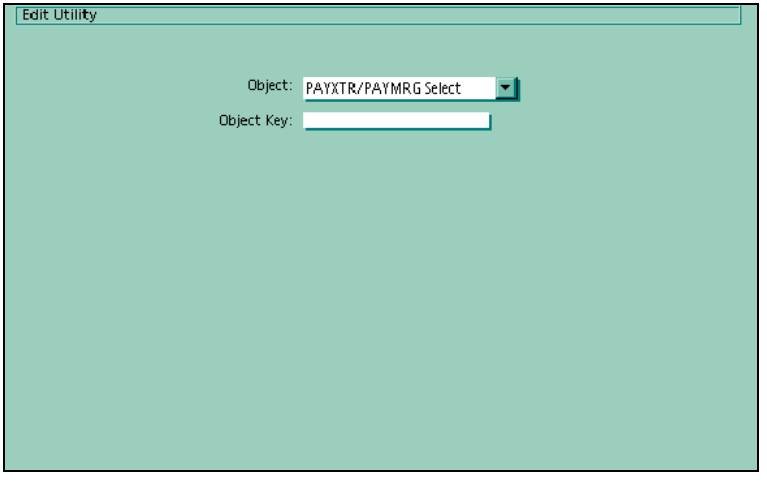
You access this form by selecting:

Component: Development Tools
Process: System Control Repository Utilities
Task: Edit Control Repository Object

The Edit Utility form is displayed.

2. Select the Extract (EXT) record

Select PAYXTR/PAYMRG Select from the Object pull-down list.



3. Press Enter

The EXT00ALL record is displayed in the Editor.

4. Delete the Extract (EXT) record

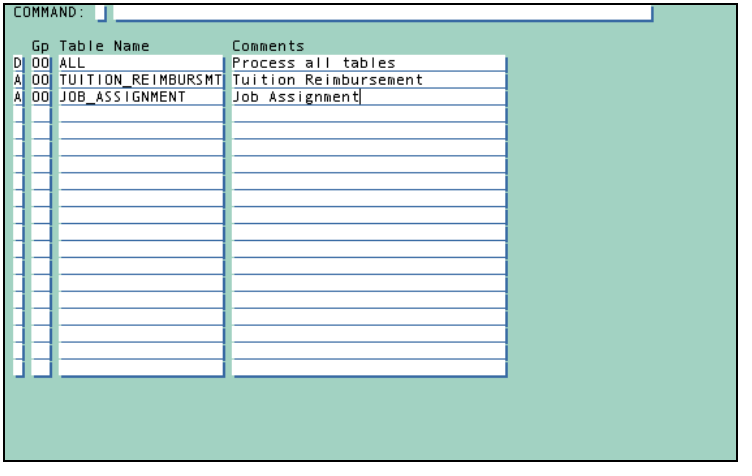
Type a 'D' in the action field next to the record.

5. Specify table data

If you need to use additional tables, create an Extract (EXT) record for each table to include in the pay extract process.

The format of this record is shown in the following table:

In these positions	Enter	Description
01–03	EXT	Record identifier
04–05	00 xx	Payroll processing group Future use
06–23	table name or ALL	18-character name of the table
24–53	user defined	Comments



6. **Press Enter**

See also:

- Selectable table processing for Payroll ***(on page 354)***

To learn the different methods for performing Pay Extracts and Pay Merges.

Optimizing for Labor and History records

To leave existing Labor and History records on your database rather than deleting and replacing them, you must enter an 'A' in the PAYMRG control record in position 40, which is the last position of the key field as shown below:

```
         1         2         3         4         5         6
1234567890123456789012345678901213456789012345678901234567890
                999999PAYMRG            A1 7 1
                999999PAYMRG            A2 2 1
```

When you do this, you will see a message in your FILE03 report indicating 'Adding/Updating Labor and History'.

You will eventually want to purge Labor and History records.

When you do this, you must not use the 'A' in the PAYMRG control record. When the 'A' is not used, CBSVB will delete all of the data in the existing Labor and History tables and replace them with the data from FILE11. This will cause the message 'Labor and History tables will be replaced' to be in the FILE03 report.

See also:

- Labor and History record optimization ***(on page 357)***

To learn how controlling labor and history records can improve performance.

Review of Questions answered

1. What is the difference between static and dynamic SQL?

2. When is dynamic SQL generated?

3. Why is static SQL more efficient than dynamic SQL?

4. What methods are available to improve pay extract and pay merge processing run times?

5. If I want to improve pay extract and pay merge processing run times, can I still restrict the organizations in the run?

CHAPTER 17

Administering Reporting Administration

In This Chapter

Introduction

Before successful reporting can take place between the client computer running Cognos Impromptu and PowerPlay, and the server running The Solution Series, you must retrieve the information from The Solution Series and place it in the data mart.

This section guides you through the processes required for getting the data to the Impromptu users.

Tasks

This section explains the following:

- Backing up Reporting Administration components
- Selecting the extract components
- Extracting core system data
- Extracting Labor and History data
- Recovering core system extract
- Recovering Labor and History extract

Prerequisites

Before you can successfully perform the tasks described in this section, you must have:

- Installed Reporting Administration on the server
- Installed Cognos Impromptu on the client computer(s)
- Installed Cognos PowerPlay on the client computer(s)
- Configured the client computer(s) to point to the relational tables (data mart) resulting from the extraction process

☞ *Refer to the Installing and Configuring Reporting Administration guide for instructions on performing these tasks on your computer platform.*

- Attended the Cognos administrator classes for Impromptu and PowerPlay

Questions answered

The following questions are answered in this section:

1. What are the three stages of the extraction/insertion process?
2. How do the Core System and Labor and History extractions differ?
3. What is a data mart?

Extraction/Insertion overview

Data is extracted from The Solution Series and is loaded into the data mart via a temporary system file, the Data mart Extract File (FILE36).

There are two extract/import processes performed, depending on the type of data you want—core system or Labor and History.

The core system extraction copies data from the System Control Repository and Employee Database and places the copied data in the Data mart Extract File.

A COBOL program, the Data mart Extract File Splitter (RSPLIT), creates separate files for every representative table, with the Data mart Extract File as input.

An SQL script generated by the extract process truncates (empties) the target data mart table via an SQL interpreter and a bulk loader then loads the data from the tables created by the splitter program into the data mart table.

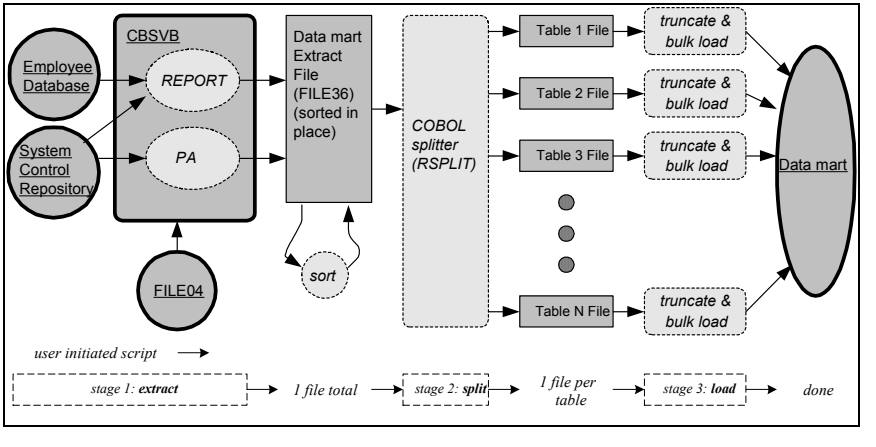
Stage 1: Extract

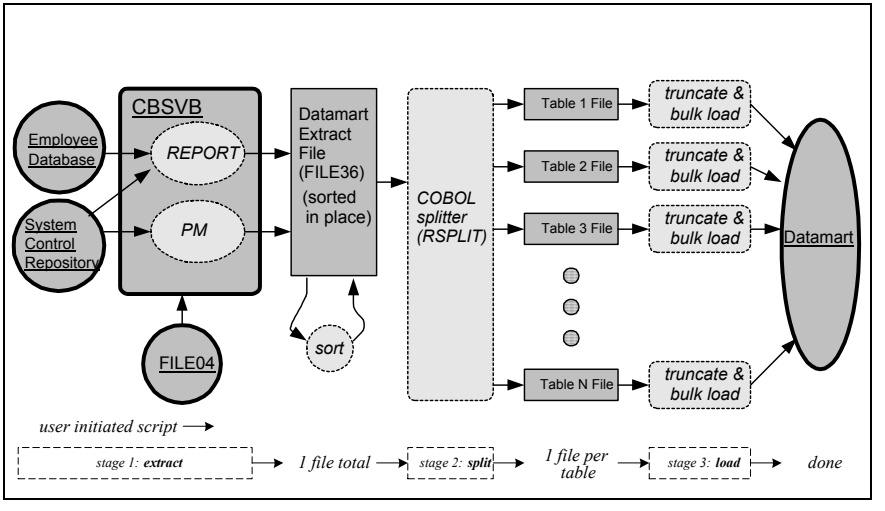
Core system extraction

Core system extraction is done using two different algorithms.

The majority of the data is extracted using REPORT, while the Position Management (PM) process, which is incompatible with REPORT, derives the Position Management data.

The following figure depicts core system extraction:



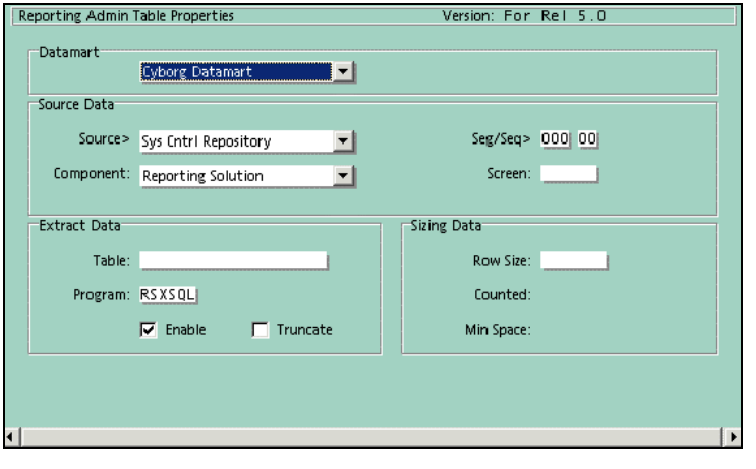


A command line script is initiated and stage 1 extraction begins. CBSV is started and reads the commands it is to perform from FILE04.

The first extract step in FILE04 is to run the REPORT program.

The System Control Repository contains a table of names of extraction routines to run, approximately one routine per Reporting Administration table. The table contains information about each routine, including whether or not its data is flagged to be extracted.

The datamart administrator can modify this list (turning on/off or adding/subtracting routines) through the Reporting Administration Table Properties form (RSXSCR):



Note: *The Reporting Administration Table Properties form is intended for use by the datamart administrator only. Detailed knowledge of the architecture of The Solution Series and the*

data model is required to use this form. Attending the Customizing Reporting Administration class is recommended in order to fully understand the use of this form.

The REPORT program reads this list and loops through it, executing each Cyborg Scripting Language (CSL) routine that is turned on.

The CSL routines are designed to extract all data necessary to populate their target Reporting Administration table and write it to the Datamart Extract File (FILE36), in the order in which the corresponding columns occur in the target datamart table.

Once REPORT completes, the next step in FILE04 will cause CBSV to derive the Position Management information and append it to the Datamart Extract File (FILE36).

After all CSL routines (turned on in the list) have been executed, a small sort routine is executed on the Datamart Extract File (FILE36) to group records by datamart table, and stage 1 is completed.

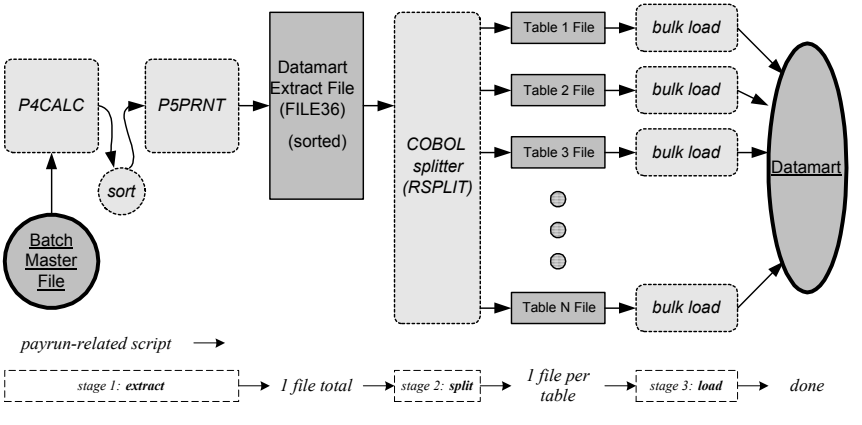
See also:

■ Extracting core system data from the command prompt ***(on page 382)***
For detailed directions on extracting core system data.

Labor and History extraction

A payroll-related process initiates a script and stage 1 extraction begins.

In the following figure, Labor and History extraction is depicted:



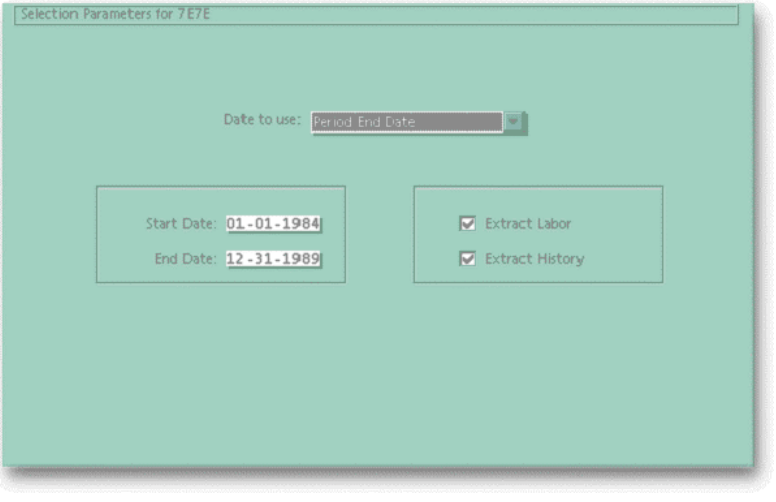
Rather than extracting Labor and History data from the Employee Database, it is extracted from the Batch Master File (P20) using the Report Generator (RG) routine: the data mart Labor and History Extract (7E7E).

The P4CALC and P5PRNT programs are run in sequence over payroll data, writing new Labor and History records to the data mart Extract File, and stage 1 is completed.

There is sometimes a problem when there is not enough space when running the generator to extract for Reporting Administration.

The 7E7E generator has been modified to read a WFLD7E7E transaction and only process those records which fall within the dates on the transaction or to process only labor or only history records.

The Selection Parameters for 7E7E form (RSPSCR) was created to enter the WFLD7E7E transaction:



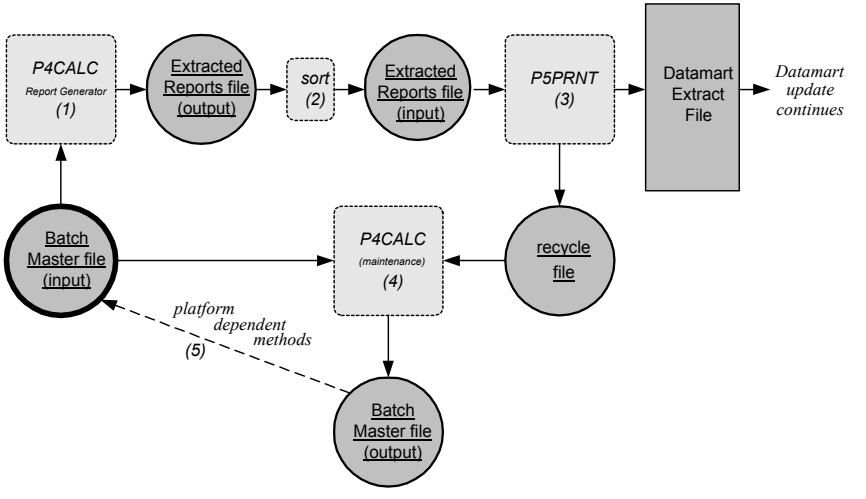
If there is no WLFD7E7E transaction the generator extracts all records not previously extracted.

Note: *If a 'FILE SIZE TOO LARGE' message is displayed during P45SORT, too much labor/history data is being extracted. The Selection Parameters for 7E7E form (RSPSCR) should be used to enter parameters to selectively extract the data within date ranges.*

This process may have to be run multiple times based on the amount of labor and/or history on P20.

If no WL transaction is entered, all labor/history not marked as already extracted will be extracted.

The following figure depicts Stage 1 of the Labor and History extract process:



The following steps occur in sequence as the main part of stage 1 of each Labor and History extraction:

1. P4CALC uses the Report Generator function to process the Batch Master File, extracting all new, unmarked Labor and History records (these are ones that have not been previously extracted) into an Extracted Reports output file.
2. The Extracted Reports output file is sorted into the Extracted Reports input file.
3. P5PRNT processes the Extracted Reports input file, writing all extracted records to the data mart Extract File for the data mart update and creating a recycle file so that these newly extracted records can be later marked in the Batch Master file.

Note: At this point, stages 2 and 3 of Labor and History extraction can proceed independently to complete the (re)population of the data mart.

1. P4CALC, in a maintenance cycle, processes the recycle file and Batch Master input file, marking the recently extracted records and writing the complete, updated Batch Master file contents to the Batch Master output file.
2. The Batch Master output file is migrated back to be the next Batch Master input file through platform dependent methods.

At this point, all steps for stage 1 of Labor and History incremental extraction are completed.

See also:

■ Extracting Labor and History data from the command prompt ***(on page 384)***
For detailed directions on extracting Labor and History data.

Core System versus Labor and History extraction

Labor and History extraction differs in several ways from core system extraction.

For example, Labor and History extraction uses payroll-related processes rather than CBSV and the System Control Repository and Employee Database to extract Solution Series data. This is because the nature and location of Labor and History records, primarily contained within static data in the Batch Master File, make it very difficult to do otherwise.

The static nature of most Labor and History records also leads to the other main difference from core system extraction. Since a company's Labor and History records build linearly with time, and once created hardly ever change except to add new ones, a strategy to incrementally extract only the newly created records is an absolute necessity.

Normally, Labor and History extraction employs an incremental strategy by accessing the Batch Master File twice during extraction activities, the first time to actually extract records and the second time to mark the just accessed records so they are not extracted again.

On occasion you may wish to extract all labor and history data, regardless of whether or not they have been previously extracted. You would do this using the 'ALL' feature in the User Field on the Report Request form (DD-SCR).

Apply the Concept
What are the two main types of extracts and what are the differences between them?

Stage 2: Split

The data being output to The Data mart Extract File (FILE36) is not in an appropriate form for the bulk loaders. This file therefore needs to be split into separate files after it has been sorted.

The splitting process is very simple. A COBOL program is run, taking the Data mart Extract File (FILE36) as input and creating a separate file for each target Reporting Administration table, with all the data intended for that table properly formatted for loading into Reporting Administration through bulk loader methods.

This process is the same for both core system and Labor and History extractions.

Stage 3: Load

The loading process is also very simple. For each table file, a bulk loader is run that uses platform-specific configuration information found in a separate format file.

There is one format file for each table file.

An SQL script generated by the extract process is run to truncate (empty) the target Reporting Administration table prior to bulk loading. When all table files are bulk loaded, the (re)population of the data mart is complete.

Stage 3 of Labor and History extraction is similar to those for core system extraction. Since Labor and History extraction is incremental, however, there are two differences in the stage 3 processing:

- Data extracted for the first time is bulk loaded without first truncating the target table.
- Data which was extracted due to change is placed in a separate file so that it can be used to update the target table.

The data mart

The extract process automatically (re)populates the data mart.

The data mart is a relational database on the server that contains tables populated by the enhanced data. The Reporting Administration data mart consists of approximately 172 tables containing the following data:

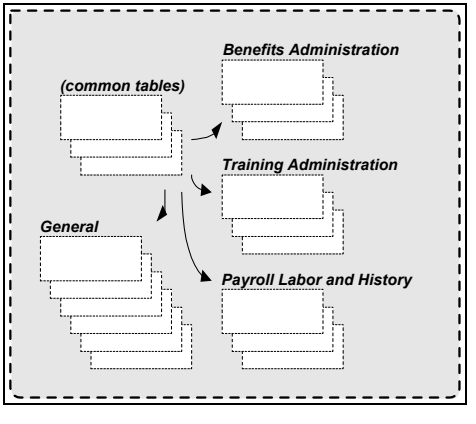
- Company Information
- Employee Information
- Position Administration Information
- Earnings and Deductions
- Labor and History
- Training Administration
- Employee Skills, Competencies and Abilities
- Benefits Administration

It is organized into 34 sub-models and a collection of common tables. The four main components are:

- General
- Payroll Labor and History
- Training Administration
- Benefits Administration

☞ *Refer to the Workforce Data Mart Data Model, Overview of the Data Model for detailed information on the sub-models.*

The following figure shows the general data mart organization.



When the data is pulled from The Solution Series, Reporting Administration is able to automatically populate its tables, making the data immediately available for users to report upon.

If the data mart remains on the server at the location the data was extracted to, it will be overwritten each time an extract is performed, which means these files (if not moved) always contain the most current extract data.

Note: *The database administrator is responsible for maintaining the data mart. Users will create views of the data, based on effective dates they enter when using Impromptu, but these views are dynamic and unique to each user, and are not the responsibility of the database administrator.*

A spreadsheet, the Reporting Administration Cyborg Catalog Cross Reference, which shows the data elements of the data mart and catalogs is available on CUBBS and can be downloaded.

This tool is delivered in a soft copy format so you can add data elements or re-sort it to meet your needs.

If you choose to print it, it will have to be done on legal paper size to get the formatting to show correctly.

Any data element marked DATA MART ONLY is an element that will only be shown in the Administrator's folders.

There is a tab for the filters, since they can be copied into another folder if needed.

☞ *Refer to The Solution Series Data Model and the Workforce Data Mart Data Model for more details on the data elements.*

Cyborg's delivered Impromptu catalogs setup

There are several ways to set up an Impromptu catalog.

The delivered Cyborg catalogs are distributed catalogs. This means they reside on the Impromptu administrator's computer and the administrator makes them available to other users.

The Cognos Impromptu administrator configures different levels of security (user classes) for different types of users, presenting only the information appropriate for an Impromptu user's specific security class.

Users may create their own reports with the data from the catalogs, but do not have the authority to change it since The Solution Series restricts users to a read-only version of the catalog files.

Cyborg suggests that the Impromptu administrator use distributed copies of the delivered catalogs. This way, you can receive and apply future enhancements from Cyborg without affecting any custom folders you may have set up in the catalogs for your organizational or personal use. You can then distribute copies of your customized version of the catalogs to your users however you see fit (as 'shared', 'secured', or 'distributed').

Note: *We recommend that you create a secured folder into which you copy the delivered catalogs prior to making any customization.*

☞ *Refer to the Customizing Reporting Administration documentation for further details on customizing catalogs. This documentation is only available to those attending the Customizing Reporting Administration class due to the complexity of customizing TRS.*

Detailed Directions

This section provides detailed directions on completing a business task.

Tasks

Backing up Reporting Solution components

To back up Reporting Administration components, follow these steps:

Note: It is recommended that a backup is taken of the database prior to each new extract.

1. Backup The Solution Series

You should ensure that there is a strategy in place to ensure the integrity of the data in The Solution Series and that there are procedures to restore this data if needed.

☞ *Refer to* **Using the Backup and Restore Utilities** *(on page 259) for information on backup procedures.*

2. Backup the data mart

You may wish to maintain backup copies of the data mart which could be used to restore the data mart in the event of a problem with new data.

You should discuss a backup strategy of the data mart with your database administrator.

☞ *Refer to the documentation for your relational tool for information on database backup procedures.*

3. Backup the data mart Extract file (FILE36)

You may wish to maintain backup copies of the extract files from the last extract.

You should discuss a backup strategy of the data mart Extract file (FILE36) with your database administrator.

Selecting the extract components

Use the Report Parameters for Reporting Administration Extract Report form (RSXRPT) to select which Solution Series components are extracted.

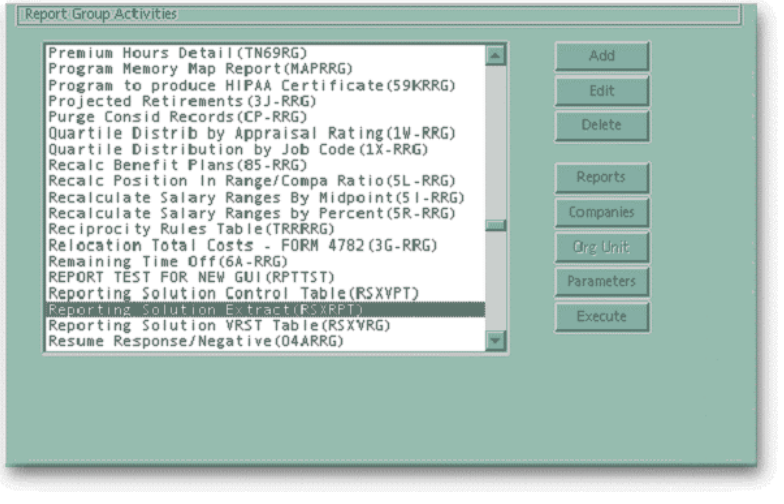
Note: This form is generally configured during installation. Take care when amending this form, as you may not get the data you expect in the extract if you de-select a module.

Note: You should not need to revisit this configuration unless you want to create multiple, separate data marts.

1. Access the Report Group Activities form

Access the Report Group Activities form by making the following menu selection:

Component: Reporting
Process: Report Scheduling
Task: Schedule Report Groups



For practice, access the Report Group Activities form.

2. Select Reporting Solution Extract (RSXRPT)

From the Report list, select Reporting Administration Extract (RSXRPT) and click Parameters.

The Parameter Selection for Reporting Administration Extract form (RSXRPT) will display.

For practice, select Reporting Administration Extract (RSXRPT) and click Parameters.

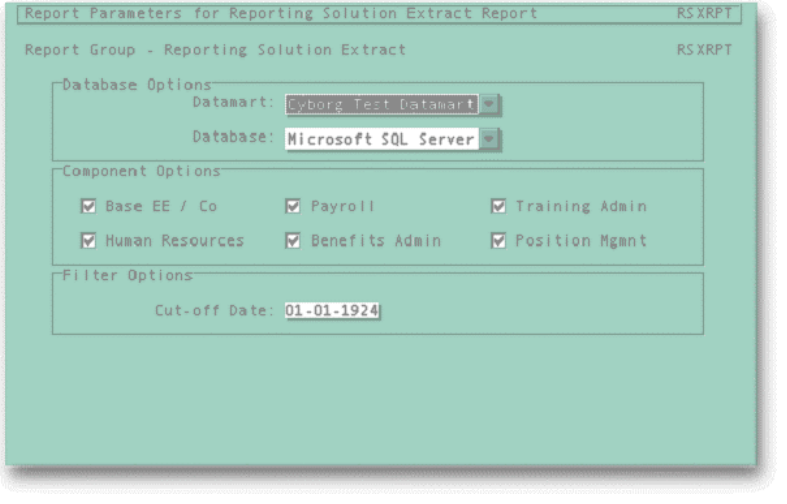
3. Click Set Parameters

Click Set Parameters.

The Report Parameters for the Reporting Administration Extract Report form (RSXRPT) will display.

For practice, click Parameters.

If you completed the Guided Practice, the results should look similar to the example that follows:



4. Select data mart

Select the name of the data mart to receive the extracted data.

Normally you would only have one data mart, but it is possible to have more than one. An example would be a live data mart and a test data mart.

For practice, leave as is.

5. Select database

Select the target database to receive the extracted data and SQL. This is needed so that the appropriate SQL scripts are created.

For practice, leave as is.

6. Select module options

Select any Solution Series modules that are to be included in the data extract. The extract process is faster if you turn off modules which are not part of your installed system.

For practice, leave as is.

7. Specify cut-off date

Data superceded prior to the date specified in this text box will not be extracted. It should be in the format of MM-DD-CCYY or CCYYMMDD (US and Canada) or DD-MM-CCYY or CCYYDDMM (elsewhere).

Note: This does not apply to Position Administration data.

For practice, leave as is.

8. Press Enter

The parameters for the extract have now been set.

. *For practice, press Enter.*

See also:

- Extraction/Insertion overview ***(on page 369)***

For more information on the extract process.

Extracting core system data from the command prompt

The process for extracting core system data can be initiated in one of two ways:

- From the command prompt
- Using a scheduler

To extract the core system data from the command prompt, follow these steps:

1. Access extract scripts

Access the command prompt and go to the *n*:*Cyborgxx0*\Runs directory, where *n* is the drive, and *Cyborgxx is* the directory on which the extract script is stored, and '*xx*' represents the version of The Solution Series you are using.

For practice, access the \Runs subdirectory.

2. Execute extract

At the command prompt, type:

```
jrsxrpt > \log\jrsxrpt.log
```

For practice, type 'jrsxrpt > \log\jrsxrpt'.

3. Press Enter

Press Enter.

The extract batch file will run, calling the splitter and bulk load programs, and the data mart will be created.

For practice, press Enter.

4. Verify extract

If the batch job has successfully run there will be no errors in the following log files:

- *n*:*Cyborgxx*\Log\jrsxrpt.log
- *n*:*Cyborgxx*\Log\jrsxsplt.log
- *n*:*Cyborgxx*\Log\jrsxload.log

In addition, there should be no '.bad' files with non-zero sizes in the *n*:*Cyborgxx*\BCPERR directory.

For practice, open jrsxrpt.log, jrsxsplt.log, and jrsxload.log files and ensure that there are no errors in the files. Check the size of the '.bad' files. Open any with a non-zero size and check for errors.

See also:

- ***Core system extraction***

For more information on core system extraction.

Extracting core system data using a scheduler

If your system has a scheduler installed, the batch job could be scheduled to run automatically at a particular time, for example overnight.

1. Decide extract schedule

Decide on a schedule for the extract process, for example once a week, overnight on a Wednesday, but before the Labor and History extraction is scheduled to run.

Note: Be sure to notify users of your data mart extract schedule as they must make reporting decisions depending on when they need data and how close to 'live' it must be.

2. Log onto the server

Log onto the server using an account with administrator privileges.

For practice, log onto the server using the administrator user id and password.

3. Schedule job

Using your operating system's scheduler, schedule jrsxrpt.bat to run on the days and times previously identified.

For practice, add jrsxrpt.bat to the system scheduler.

4. Verify extract

Verify the extract after it has been run. If the batch job has successfully run there will be no errors in the following log files:

- *n*:*Cyborgxx*\Log\jrsxrpt.log
- *n*:*Cyborgxx*\Log\jrsxsplt.log
- *n*:*Cyborgxx*\Log\jrsxload.log

In addition, there should be no '.bad' files with non-zero sizes in the *n*:*Cyborgxx*directory.

For practice, open jrsxrpt.log, jrsxsplt.log, and jrsxload.log files and ensure that there are no errors in the files. Check the size of the '.bad' files. Open any with a non-zero size and check for errors.

See also:

- ***Core system extraction***

For more information on core system extraction.

Extracting Labor and History data from the command prompt

The process for extracting Labor and History data can be initiated in one of two ways:

- From the command prompt
- Using a scheduler

To extract the Labor and History data from the command prompt, follow these steps:

1. Access extract scripts

Access the command prompt and go to the *n*:*Cyborgxx*\Runs directory, where *n* is the drive, and *Cyborgxx* is the directory on which the extract scripts are stored.

'xx' represents the version of The Solution Series you are using.

For practice, access the \Runs subdirectory.

2. Execute extract

At the command prompt, type:

```
jrsxpay > \log\jrsxpay
```

For practice, type ' jrsxpay > \log\jrsxpay'.

3. Press Enter

Press Enter.

The extract batch file will run, calling the splitter and bulk load programs, and the data mart will be created.

For practice, press Enter.

4. Verify extract

If the batch job has successfully run there will be no errors in the *n*:*Cyborgxx*\Log\jrsxpay.log log file.

In addition, there should be no '.bad' files with non-zero size in the *n*:*Cyborgxx*\BCPERR directory.

'xx' represents the version of The Solution Series you are using.

For practice, open jrsxpay.log, file and ensure that there are no errors in the files. Check the size of the '.bad' files. Open any with a non-zero size and check for errors.

See also:

- Labor and History extraction ***(on page 371)***

For more information on Labor and History extraction.

Extracting Labor and History data using a scheduler

If your system has a scheduler installed, the batch job could be scheduled to run automatically at a particular time, for example, overnight.

1. Decide extract schedule

Decide on a schedule for the extract process, for example, once a week overnight on a Wednesday, but after the core system extraction is complete.

Note: Be sure to notify users of your data mart extract schedule as they must make reporting decisions depending on when they need data and how close to 'live' it must be.

2. Log onto the server

Log onto the server using an account with administrator privileges.

For practice, log onto the server using the administrator user id and password.

3. Schedule job

Using your operating system's scheduler, schedule jrsxpay.bat to run on the days and times previously identified.

For practice, add jrsxpay.bat to the system scheduler.

4. Verify extract

Verify the extract after it has been run. If the batch job has successfully run there will be no errors in the *n*:*Cyborgxx*\Log\jrsxpay.log log file.

In addition, there should be no '.bad' files with non-zero sizes in the *n*:*Cyborgxx*\BCPERR directory.

For practice, open jrsxpay.log, file and ensure that there are no errors in the files. Check the size of the '.bad' files. Open any with a non-zero size and check for errors.

See also:

- Labor and History extraction ***(on page 371)***

For more information on Labor and History extraction.

Recovering core system extract

In the event of a failure during a core system extract, refer to the following table for the appropriate recovery action you would need to take:

Script	Step of failure	Resolution	Notes
JRSXRPT	CBSVB	Restart script at 'Extract'	
	Sort Split Truncate Load	Restart script at 'Sort'	The script does not stop when an error occurs and, to conserve disk space, intermediate files are cleaned up. As a result, it is not possible to restart the scripts at any desired point. FILE36 is preserved, allowing the script to be restarted on the step just following extraction. You may wish to manually delete FILE36 following a successful extraction.

Recovering Labor and History extract

In the event of a failure during a Labor and History extract, refer to the following table for the appropriate recovery action you would need to take:

Script	Step of failure	Resolution	Notes
JRSXPAY	Split Purge	Restart script at 'Split'	The script does not stop when an error occurs and, to conserve disk space, intermediate files are cleaned up. As a result, it is not possible to restart the scripts at any desired point. FILE36 is preserved, allowing the script to be restarted on the step just following extraction. You may wish to manually delete FILE36 following a successful extraction.
	Load	Set the error threshold high on the table that was loading when the crash occurred. Delete the data files for those tables that have already loaded. Restart script at 'Split'	You will get errors for the data that loaded prior to the crash. These errors can be ignored.
JMNTRUN		Restart payrun process from the beginning, using the backup copies of the files that feed the payrun process.	Currently P5PRNT overwrites the recycle file. If a crash occurs in P5PRNT, the job must be restarted at that point. Note that the delivered script will require editing to do this.

Note: Since Labor and History extraction is incremental, a case may arise where you need to re-extract data that has already been marked as extracted. The simplest solution is to truncate the Labor and History tables and re-extract all the Labor and History data, by passing the ALL parameter to the Report Generator (7E7E) by using the User Field on the Report Request form (DD-SCR).

There is no delivered script for this, so the recommendation is that you contact Cyborg Customer Support in this event.

Review of Questions answered

1. What are the three stages of the extraction/insertion process?

2. How do the Core System and Labor and History extractions differ?

3. What is a data mart?

PART 5

Appendices

In This Section

APPENDIX A

Working Storage Expansion Worksheets

In This Appendix

Employee Area Expand Worksheet

Step	Action	Calculation		Amt.
1.	Determine if expansion is required.			
	a. Use the RECSIZ report to calculate the Positions Left in Working Storage for the Employee Record.	Maximum Employee Record		
		Largest Employee Record	+	
		Positions Left	=	
	b. Calculate the Employee Record growth size for the next 6–12 months (Complete the Employee Record/Segment Growth Worksheet).	Growth Estimate	=	
	c. Calculate the Estimated Expansion Requirement.	Growth Estimate (Step 1b)		
		Safety Factor	+	2000
		Estimated Expansion Requirement	=	
Note:	*If the Estimated Expansion Requirement is* **Less Than** *the Positions Left,* **NO EXPANSION IS REQUIRED.**			
2.	Calculate the Employee Area Expand Amount for the Payroll Process and The Solution Series.			
	a. Calculate the Working Storage Requirement.	Largest Employee Record (Step 1a)		
		Estimated Expansion Requirement (Step 1c)	+	
		Working Storage Requirement	=	
	b. Calculate The Solution Series Expand Amount by subtracting The Solution Series Base Area 2 Value.	Working Storage Requirement (Step 2a)		
		The Solution Series Base Area 2	-	5301
		The Solution Series Expand Amount	=	

Step	Action	Calculation		Amt.
	c. Calculate the Payroll Process Expand Amount by subtracting the Payroll Process Base Value.	Working Storage Requirement (Step 2a)		
		Payroll Process Base Value	-	23688
		Payroll Process Expand Amount		
3.	Expand The Solution Series AREA2-BOTH field on the EXPAND screen.	CSSS Base Value		
		The Solution Series Expand Amount (Step 2b)	+	
		AREA2-BOTH	=	
4.	Expand the Payroll Process P4CALC and O4CALC programs by replacing the EXPAND EMPLOYEE value with the Payroll Process Expand Amount (Step 2c) in the P05RDR file.			

```
         1    1    2    2    3    3    4    4    5    5    6    6    7    7    8
1...5....0....5....0....5....0....5....0....5....0....5....0....5....0....5....0
Machine parameter transaction
EXPAND EMPLOYEE         00000
EXPAND PAYER            00000
EXPAND TAX              00000
EXPAND REPORT ONLINE    00000
EXPAND RPT20            00000
EXPAND AREAW            00000
Additional COBOL overrides...
```

5.	Extract the Payroll Process Programs using the P9CNVT programs.	Check box when completed	□ P4CALC □ 04CALC
6.	Extract The Solution Series COBOL programs using the PULL program	Check box when completed	□ CBSVO □ CBSVOT □ CBSVB □ CBSVBT

7.	Compile and Link ALL COBOL programs	Check box when completed	□ P4CALC □ 04CALC □ CBSVO □ CBSVOT □ CBSVB □ CBSVBT
8.	Purge old expand records using DEL-ZX	Check box when completed	□ DEL-ZX

Employee Record/Segment Growth Worksheet

Step	Segment Type	Segment Size		Number of Segments to be added		Estimated Segment Size
1.	**F** - Name & Address	124	X		=	
2.	**G** - Labor Detail	34	X		=	
3.	**H** - Earnings & Deductions	101 (4 byte counter)				
	* See Note	OR				
		109 (5 byte counter)	X		=	
		OR				
		117 (6 byte counter)				
4.	**J** - Employee Taxes	163 (4 byte counter)				
	* See Note	OR				
		195 (5 byte counter)	X		=	
		OR				
		227 (6 byte counter)				
5.	**L** - HR/User Defined Data	71	X		=	
6.	**P** - Period End Table	19 (4 byte counter)				
	* See Note	OR				
		22 (5 byte counter)	X		=	
		OR				
		25 (6 byte counter)				
7.	Total Employee Record/Segment Growth				=	

Note: The Quick Solution Technical Reference Guide contains the list of computers that use either the 4, 5, or 6 byte counters in the Operating System Codes section.

Company Area Expand Worksheet

Step	Action	Calculation		Amt.
1.	Determine if expansion is required.			
	a. Use the RECSIZ report to calculate the Positions Left in Working Storage for the Company Record.	Maximum Company Record		
		Largest Company Record		
		Positions Left	=	
	b. Calculate the Company Record growth size for the next 6–12 months (Complete the Company Record/Segment Growth Worksheet).	Growth Estimate	=	
	c. Calculate the Estimated Storage Requirement.	Growth Estimate (Step 1b)		
		Safety Factor	+	2000
		Estimated Storage Requirement	=	
Note:	If the Estimated Storage Requirement is **Less Than** the Positions Left, **NO EXPANSION IS REQUIRED**.			
2.	Calculate the Company Area Expand Amount for the Payroll Process and The Solution Series.			
	a. Calculate The Solution Series Working Storage Requirement.	Largest Company Record (Step 1a)		
		Estimated Storage Requirement (Step 1c)	+	
		Working Storage Requirement	=	
	b. Calculate The Solution Series Expand amount by subtracting The Solution Series Base Area 4 Value	Working Storage Requirement (Step 2a)		
		The Solution Series Base Area 4	-	8079
		The Solution Series Expand Amount	=	
	c. Calculate the Payroll Process Expand Amount by subtracting the Payroll Process Base Value.	Working Storage Requirement (Step 2a)		

Step	Action	Calculation		Amt.
		Payroll Process Base Value	-	32012
		Payroll Process Expand Amount	=	
3.	Expand The Solution Series AREA4-BOTH field on the EXPAND screen.	CSSS Base Value		0
		The Solution Series Expand Amount (Step 2b)	+	
		AREA4-BOTH	=	
4.				

```
         1   1   2   2   3   3   4   4   5   5   6   6   7   7   8
1...5....0....5....0....5....0....5....0....5....0....5....0....5....0....5....0
Machine parameter transaction
EXPAND EMPLOYEE        00000
EXPAND PAYER           00000
EXPAND TAX             00000
EXPAND REPORT ONLINE   00000
EXPAND RPT20           00000
EXPAND AREAW           00000
Additional COBOL overrides...
```

5.	Extract the Payroll Process COBOL programs using the P9CNVT program.	Check box when complete.	☐ P4CALC ☐ O4CALC
6.	Extract The Solution Series COBOL programs using the PULL program.	Check box when complete.	☐ CBSVO ☐ CBSVOT ☐ CBSBO ☐ CBSBOT

7.	Compile and Link ALL COBOL programs.	Check box when complete.	□ P4CALC □ O4CALC □ CBSVO □ CBSVOT □ CBSBO □ CBSBOT
8.	Purge old expand records using DEL-ZX.	Check box when complete.	□ DEL-ZX

Company Record/Segment Growth Worksheet

Step	Segment Type	Segment Size		Number of Segments to add		Estimated Segment Size
1.	B—Earnings & Deductions	84	X		=	
2.	C—Other Detail/User Defined	84	X		=	
3.	D—Report Request Selection	28	X		=	
4.	**Total Company Record/Segment Growth**				=	

APPENDIX B

Relational Tables and Views

In This Appendix

Tables by Subject Area

1---Human Resources Subject Area

TABLE NAME	VIEW NAME	POINTER	TABLE REF
ADJ_EMP_STATUS	YTF_VIEW	40	TF
APPL_INTERVIEW	MLZ5_VIEW	36	Z5
APPL_PRE_TRANSFER	MLZ9_VIEW	36	Z9
APPLCNT_REF_ADDR	MLOH_VIEW	36	OH
APPLCNT_REFERENCE	MLOG_VIEW	36	OG
APPLICANT	MLOF_VIEW	36	OF
ASSIGNED_AUTO	MLZJ_VIEW	36	ZJ
ASSIGNED_PROPERTY	MLZI_VIEW	36	ZI
BENEFICIARY	MLOA_VIEW	36	OA
BENEFICIARY_ADDR	MLOB_VIEW	36	OB
BENEFICIARY_CITY	MLOC_VIEW	36	OC
BONUS	MLZE_VIEW	36	ZE
BRIDGE_LOAN	MLRR_VIEW	36	RR
CAN_EMP_EQUITY	MLPQ_VIEW	36	PQ
CANCEL_COURSE_BOOK	YT_X_VIEW	40	T*X
CERTIFICATION	MLZN_VIEW	36	ZN
CITIZENSHIP	MLZB_VIEW	36	ZB
CLASS_EVALUATION	YT_Y_VIEW	40	T*Y
CLASS_SCHEDULE	YT_S_A_VIEW	40	T*S A
CLASS_SCHEDULE_B	YT_S_B_VIEW	40	T*S B
CLASS_SCHEDULE_C	YT_S_C_VIEW	40	T*S C
CLASS_SCHEDULE_D	YT_S_D_VIEW	40	T*S D
CLASS_SCHEDULE_E	YT_S_E_VIEW	40	T*S E
CLOSING_COST_EXP	MLRQ_VIEW	36	RQ
COORDINATOR	YT_C_A_VIEW	40	T*C A
COORDINATOR_B	YT_C_B_VIEW	40	T*C B
COORDINATOR_C	YT_C_C_VIEW	40	T*C C
COORDINATOR_D	YT_C_D_VIEW	40	T*C D
COORDINATOR_E	YT_C_E_VIEW	40	T*C E
COURSE_BOOKING	YT_Z_VIEW	40	T*Z
COURSE_DEVP_COST	YT_A_VIEW	40	T*A
COURSE_OFFERING	YT_D_A_VIEW	40	T*D A
COURSE_OFFERING_B	YT_D_B_VIEW	40	T*D B

TABLE NAME	VIEW NAME	POINTER	TABLE REF
COURSE_OFFERING_C	YT_D_C_VIEW	40	T*D C
COURSE_OFFERING_D	YT_D_D_VIEW	40	T*D D
COURSE_OFFERING_E	YT_D_E_VIEW	40	T*D E
COURSE_OFFERING_F	YT_D_F_VIEW	40	T*D F
COURSE_PROVIDER	YT_N_A_VIEW	40	T*N A
COURSE_PROVIDER_B	YT_N_B_VIEW	40	T*N B
COURSE_PROVIDER_C	YT_N_C_VIEW	40	T*N C
COURSE_PROVIDER_D	YT_N_D_VIEW	40	T*N D
COURSE_PROVIDER_E	YT_N_E_VIEW	40	T*N E
DEPENDENT	MLO1_VIEW	36	01
DEPENDENT_EMPLYR	MLO2_VIEW	36	02
DEPENDENT_INSUR	MLO3_VIEW	36	03
DISCIPLINE_ACTION	MLRD_VIEW	36	RD
DRIVERS_LICENSE	MLZL_VIEW	36	ZL
EEO_4_EXEMPTIONS	MLVE_VIEW	36	VE
EEO_6	MLO8_VIEW	36	08
EEO_ESTABLISHMNT	YTX__A_VIEW	40	TX A
EEO_ESTABLISHMNT_B	YTX__B_VIEW	40	TX B
EEO_ESTABLISHMNT_C	YTX__C_VIEW	40	TX C
EEO_ESTABLISHMNT_D	YTX__D_VIEW	40	TX D
EEO_ESTABLISHMNT_E	YTX__E_VIEW	40	TX E
EMP_CLASS_COST	MLT5_VIEW	36	T5
EMP_CLASS_REG	MLT0_VIEW	36	T0
EMP_CLASS_RESULT	MLT2_VIEW	36	T2
EMP_COURSE_OBJ	MLT3_VIEW	36	T3
EMP_EARN_DED	MH_VIEW	32	MH
EMP_INCUMBENCY	MLPM_VIEW	36	PM
EMP_LOCATION	MLZR_VIEW	36	ZR
EMP_SKILL	MLZ4_VIEW	36	Z4
EMP_TRAIN_COURSE	MLZ3_VIEW	36	Z3
EMP_TRAIN_REQ	MLT1_VIEW	36	T1
EMP_TRAIN_SALARY	MLT4_VIEW	36	T4
EMPLOYEE_1	MLZA_VIEW	36	ZA
EMPLOYEE_CONTACT	MLWF_VIEW	36	WF
EMPLOYEE_TRANSFER	MEEB_VIEW	29	EB
EMPLOYMT_ACTIVITY	MLZC_VIEW	36	ZC
EMRGY_CONTACT	MLO4_VIEW	36	O4

TABLE NAME	VIEW NAME	POINTER	TABLE REF
EMRGY_CONTACT_ADDR	MLO5_VIEW	36	O5
EMRGY_PHYS_ADDR	MLO7_VIEW	36	O7
EMRGY_PHYSICIAN	MLO6_VIEW	36	O6
EXIT_INTERVIEW	MLZK_VIEW	36	ZK
FORMAL_EDUCATION	MLZ1_VIEW	36	Z1
GRIEVANCE	MLVG_VIEW	36	VG
HEALTH_CONDITION	MLZM_VIEW	36	ZM
HOUSE_HUNTING_EXP	MLRM_VIEW	36	RM
HR_TABLE_CTRL	YTZAX_VIEW	40	TZAX
IMAGE_INFORMATION	MLWA_VIEW	36	WA
JOB_APPLIED_FOR	MLOI_VIEW	36	OI
JOB_ASSIGNMENT	MLZD_VIEW	36	ZD
JOB_BASIC	YT0D01_VIEW	40	T0D01
JOB_BASIC_02	YT0D02_VIEW	40	T0D02
JOB_CODE	YTA__A_VIEW	40	TA A
JOB_CODE_B	YTA__B_VIEW	40	TA B
JOB_DOC_REF	YT0D10_VIEW	40	T0D10
JOB_EDUCATION	YT0D08_VIEW	40	T0D08
JOB_EVAL_CRIT	YT0D04_VIEW	40	T0D04
JOB_EVAL_PROFILE	YTC__A_VIEW	40	TC A
JOB_EVAL_PROFILE_B	YTC__B_VIEW	40	TC B
JOB_EVALUATION	YT0D03_VIEW	40	T0D03
JOB_LICENSES	YT0D07_VIEW	40	T0D07
JOB_MEMBERSHIP	YT0D06_VIEW	40	T0D06
JOB_NEXT_JOB	YT0D09_VIEW	40	T0D09
JOB_REQ_EXP	YT0D11_VIEW	40	T0D11
JOB_REQ_TRAINING	YT0D13_VIEW	40	T0D13
JOB_SKILLS	YT0D05_VIEW	40	T0D05
MONETARY_PERQ	MLZT_VIEW	36	ZT
MOVING_EXPENSE	MLRN_VIEW	36	RN
NAME_ADDRESS	MF_VIEW	30	MF
NON_MONETARY_PERQ	MLZH_VIEW	36	ZH
OCCUPATION_GROUP	YTE_VIEW	40	TE
ORG_UNIT_BASIC	YT0B01_VIEW	40	T0B01
ORG_UNIT_DEF_NAME	YT0B99_VIEW	40	T0B99
ORG_UNIT_DOC_REF	YT0B10_VIEW	40	T0B10
ORG_UNIT_FTE	YT0B03_VIEW	40	T0B03

TABLE NAME	VIEW NAME	POINTER	TABLE REF
ORG_UNIT_LVL_NAME	YT0B02_VIEW	40	T0B02
PAY_FREQUENCY	DCAJ_VIEW	23	AJ
PERFORMANCE_RATING	MLZG_VIEW	36	ZG
PHYSICAL_EXAM	MLZ7_VIEW	36	Z7
PHYSICAL_EXAM_RSLT	MLZ8_VIEW	36	Z8
PLANNED_SALARY	MLZP_VIEW	36	ZP
POSITION_ACTUAL	YPR7_VIEW	40	PR7
POSITION_ASSIGNMT	MLRS_VIEW	36	RS
POSITION_BASIC	YT0A01_VIEW	40	T0A01
POSITION_BASIC_02	YT0A02_VIEW	40	T0A02
POSITION_BUDGET_PC	YPR6_VIEW	40	WPFP
POSITION_COMPLEMNT	YT0A56_VIEW	40	T0A56
POSITION_CTL_BASIC	YPR1_VIEW	40	PR1
POSITION_CTL_SKILL	YPRS_VIEW	40	PRS
POSITION_CTRL_HDR	YPRH_VIEW	40	PRH
POSITION_DEPT	YPR5_VIEW	40	PR5
POSITION_DOC_REF	YT0A10_VIEW	40	T0A10
POSITION_EDUCATION	YT0A08_VIEW	40	T0A08
POSITION_EVAL	YT0A03_VIEW	40	T0A03
POSITION_EVAL_CRIT	YT0A04_VIEW	40	T0A04
POSITION_FROM_DATA	YPR2_VIEW	40	PR2
POSITION_FTE	YT0A55_VIEW	40	T0A55
POSITION_FUND	YT0A52_VIEW	40	T0A52
POSITION_HEADER	YPR0_VIEW	40	PR0
POSITION_INCUMBENT	YPR9_VIEW	40	PR9
POSITION_LICENSES	YT0A07_VIEW	40	T0A07
POSITION_LOCATION	YT0A51_VIEW	40	T0A51
POSITION_MEMBERSHIP	YT0A06_VIEW	40	T0A06
POSITION_MISC_DATA	YT0A12_VIEW	40	T0A12
POSITION_NARRATIVE	YPR4_VIEW	40	PR9
POSITION_NEXT_JOB	YT0A09_VIEW	40	TOA09
POSITION_NEXT_REVW	YT0A54_VIEW	40	T0A54
POSITION_REQ	YPR8_VIEW	40	PR8
POSITION_REQ_EXP	YT0A11_VIEW	40	T0A11
POSITION_REQ_TRAIN	YT0A13_VIEW	40	T0A13
POSITION_SKILLS	YT0A05_VIEW	40	PRS
POSITION_STATUS	YT0A50_VIEW	40	T0A50

TABLE NAME	VIEW NAME	POINTER	TABLE REF
POSITION_TO_DATA	YPR3_VIEW	40	PR3
POSITION_VEHICLE	YT0A53_VIEW	40	T0A53
PRIOR_EMPLOYMENT	MLZ6_VIEW	36	Z6
PROFESSIONAL_ASSOC	MLZO_VIEW	36	Z0
PROGRAM_SCHEDULE	YT_P_A_VIEW	40	T*P A
PROGRAM_SCHEDULE_B	YT_P_B_VIEW	40	T*P B
PROGRAM_SCHEDULE_C	YT_P_C_VIEW	40	T*P C
PROGRAM_SCHEDULE_D	YT_P_D_VIEW	40	T*P D
PROGRAM_SCHEDULE_E	YT_P_E_VIEW	40	T*P E
PROGRAM_SCHEDULE_F	YT_P_F_VIEW	40	T*P F
RELOCATION_1	MLRJ_VIEW	36	RJ
RELOCATION_2	MLRK_VIEW	36	RK
RELOCATION_3	MLRL_VIEW	36	RL
REQ_BASIC_DETAILS	YURT01_VIEW	40	URT01
REQ_CAND_BASIC	YURT11_VIEW	40	URT11
REQ_CAND_BASIC_2	YURT12_VIEW	40	URT12
SALARY	MLZF_VIEW	36	ZF
SALARY_CHANGE	MLPH_VIEW	36	PH
SALARY_GRADE	YTI_VIEW	40	TI
SALARY_GRADE_ANN	YTBA_VIEW	40	TBA
SALARY_GRADE_HRLY	YTBC_VIEW	40	TBC
SALARY_GRD_PAY_PD	YTBB_VIEW	40	TBB
SALARY_INC_DEFN_0	YTDT2_VIEW	40	TDT2
SALARY_INC_DEFN_1	YTDC1_VIEW	40	TDC1
SALARY_INC_DEFN_2	YTDC2_VIEW	40	TDC2
SALARY_INC_DEFN_3	YTDC3_VIEW	40	TDC3
SALARY_INC_DEFN_4	YTDC4_VIEW	40	TDC4
SALARY_INC_DEFN_5	YTDR1_VIEW	40	TDR1
SALARY_INC_DEFN_6	YTDR2_VIEW	40	TDR2
SALARY_INC_DEFN_7	YTDR3_VIEW	40	TDR3
SALARY_INC_DEFN_8	YTDR4_VIEW	40	TDR4
SALARY_INC_DEFN_9	YTDT1_VIEW	40	TDT1
SALARY_PLAN	YTH_VIEW	40	TH
SALARY_REVIEW	MLZQ_VIEW	36	ZQ
SAVINGS_BOND	MLR4_VIEW	36	R4
SCHEDULED_APPRSL	MLZS_VIEW	36	ZS
SHIPPING_EXP	MLRP_VIEW	36	RP

TABLE NAME	VIEW NAME	POINTER	TABLE REF
SYSTEM_OPTIONS	YTG_VIEW	40	TG
TEMP_LIVING_EXP	MLRO_VIEW	36	R0
TRAINING_REQUIRED	YT_T_VIEW	40	T*T
TUITION_REIMBURSMT	MLZ2_VIEW	36	Z2
WORK_PREFERENCES	MLOJ_VIEW	36	OJ

2---Benefits Subject Area

TABLE NAME	VIEW NAME	POINTER	TABLE REF
ALT_COMP_TOTALS	MLR5_VIEW	36	R5
ANNUITANT_FACTOR	YTQ_VIEW	40	TQ
AVG_DEFERRAL_PCT	MLQR_VIEW	36	QR
BENEFICIARY	MLOA_VIEW	36	OA
BENEFICIARY_PCT	MLQS_VIEW	36	QS
BENEFIT_PLAN	YTK__A_VIEW	40	TK A
BENEFIT_PLAN_B	YTK__B_VIEW	40	TK B
BENEFIT_TABLE_CTRL	YTZAY_VIEW	40	TZAY
BREAK_IN_SVC_RUL	YTU__A_VIEW	40	TU A
BREAK_IN_SVC_RUL_B	YTU__B_VIEW	40	TU B
COBRA_QUALIFY_EVNT	MLQY_VIEW	36	QY
COVERAGE_COST	YTM_VIEW	40	TM
COVERAGE_COST_B	YTZ_VIEW	40	TZ
COVERED_DEPENDENTS	MLOD_VIEW	36	OD
DB_ACCT_ACTIVITY	MLQK_VIEW	36	QK
DB_ACCT_BALANCE	MLQJ_VIEW	36	QJ
DB_PLAN_ACCUM	MLQI_VIEW	36	QI
DC_ACCT_ACTIVITY	MLQM_VIEW	36	QM
DC_ACCT_BALANCE_1	MLQP_VIEW	36	QP
DC_ACCT_BALANCE_2	MLQQ_VIEW	36	QQ
DC_ACCT_TRANSFER	MLQN_VIEW	36	QN
DC_CONTRIBUTION	MLQE_VIEW	36	QE
DC_PLAN_ACCUM	MLQL_VIEW	36	QL
DEPENDENT	MLO1_VIEW	36	01
EMP_DEFERRED_PLAN	MLQ4_VIEW	36	Q4
EMP_ELIGIBILITY	MLRA_VIEW	36	RA
EMP_FLEX_CREDITS	MLQO_VIEW	36	Q0
EMP_FLEX_PLN_CR_PR	MLOZ_VIEW	36	0Z

TABLE NAME	VIEW NAME	POINTER	TABLE REF
EMP_PLAN_CONTRIB	MLQ5_VIEW	36	Q5
EMP_PLAN_COVERAGE	MLQ8_VIEW	36	Q8
EMP_PLAN_SERVICE	MLQ3_VIEW	36	Q3
EMP_PLAN_VESTING	MLQ9_VIEW	36	Q9
EMP_RETIREMENT	MLQ0_VIEW	36	Q0
EMP_WELFARE_PLAN	MLQ1_VIEW	36	Q1
FINAL_AVG_EARNINGS	MLQX_VIEW	36	QX
FLEX_CREDIT_CALC	YU1_VIEW	40	U1
FLEX_PLAN_OPTS	YU2_VIEW	40	U2
FSA_ACCT_BALANCE	MLQT_VIEW	36	QT
FSA_CLAIM	MLQU_VIEW	36	QU
FUND_ALLOC_METHOD	YTRD_VIEW	40	TRD
FUND_INTEREST_RATE	YTRB_VIEW	40	TRB
HIGHLY_PAID_DEF_1	MLQV_VIEW	36	QV
HIGHLY_PAID_DEF_2	MLQW_VIEW	36	QW
J_S_BENEFIT_WAIVER	MLQZ_VIEW	36	QZ
MASTER_PLAN	YTP_VIEW	40	TP
PENSION_BENEFIT	MLQ6_VIEW	36	Q6
PENSION_PROJCTION	MLQ7_VIEW	36	Q7
PLAN_ALLOC_METHOD	YTRC_VIEW	40	TRC
PLAN_EARN_DED_RULE	YTS_VIEW	40	TS
PLAN_ELIGIBILITY	YTL_VIEW	40	TL
PLAN_INTEREST_RATE	YTRA_VIEW	40	TRA
PLAN_OPT_ACTIVITY	YTT_VIEW	40	TT
PLAN_PARTICIPATE	YTN__A_VIEW	40	TNA
PLAN_PARTICIPATE_B	YTN__B_VIEW	40	TN B
PLAN_RETIRE_RULE	YTJ__A_VIEW	40	TJ A
PLAN_RETIRE_RULE_B	YTJ__B_VIEW	40	TJ B
SHARE_ACCT_BALANCE	MLR2_VIEW	36	R2
SHARE_DISTRIBUTION	MLR0_VIEW	36	R0
SHARE_WITHDRAWAL	MLR1_VIEW	36	R1
STOCK_CASH_BALANCE	MLR3_VIEW	36	R3
TS_FUND_ACCUM	MLQB_VIEW	36	QB
TS_FUND_ACTIVITY	MLQC_VIEW	36	QC
TS_FUND_ALLOCATION	MLQA_VIEW	36	QA
TS_FUND_BALANCE_1	MLQF_VIEW	36	QF
TS_FUND_BALANCE_2	MLQG_VIEW	36	QG

TABLE NAME	VIEW NAME	POINTER	TABLE REF
TS_FUND_SHARE	MLQH_VIEW	36	QH
TS_FUND_TRANSFER	MLQD_VIEW	3	QD

3---Time & Attendance Subject Area

TABLE NAME	VIEW NAME	POINTER	TABLE REF
ABSENCE	MLVA_VIEW	36	VA
ABSENCE_EARN_CODE	YT_AB_VIEW	40	T<AB
AUTH_TIME_OFF	MLRT_VIEW	36	RT
CO_EARN_DED_RULE	DB_VIEW	22	B
CREW_ROTATION_08_A	YT_C2A_VIEW	40	T<C2A
CREW_ROTATION_08_B	YT_C2B_VIEW	40	T<C2B
CREW_ROTATION_08_C	YT_C2C_VIEW	40	T<C2C
CREW_ROTATION_14_A	YT_C3A_VIEW	40	T<C3A
CREW_ROTATION_14_B	YT_C3B_VIEW	40	T<C3B
CREW_ROTATION_14_C	YT_C3C_VIEW	40	T<C3C
CREW_ROTATION_14_D	YT_C3D_VIEW	40	T<C3D
ISSUED_BADGE	MLTB_VIEW	36	TB
LEAVE_OF_ABSENCE	MLQ2_VIEW	36	Q2
POLICY_ACTIVITY	YT_P_VIEW	40	T<P=
POLICY_TABLE	YT_PT_VIEW	40	T<PT
SCHEDULE_ACTIVITY	YT_S_VIEW	40	T<S=
SCHEDULE_ASSIGNMNT	MLTS_VIEW	36	TS
SCHEDULE_TABLE	YT_ST_VIEW	40	T<ST
SHIFT_PREMIUM	YT_SP_VIEW	40	T<SP
TA_EARN_CODE	YT_EC_VIEW	40	T<EC
UNAUTH_TIME_OFF	MLRU_VIEW	36	RU

4—Company and Payroll Subject Area

TABLE NAME	VIEW NAME	POINTER	TABLE REF
ACCRUAL_ROUTINE	YT_ARA_VIEW	40	T!ARA
ACCRUAL_ROUTINE_B	YT_ARB_VIEW	40	T!ARB
ACCRUAL_ROUTINE_C	YT_ARC_VIEW	40	T!ARC
ACCRUAL_SELECTION	YT_VIEW	40	T!
ACCRUAL_TABLE_CTRL	YTZAZ_VIEW	40	TZAZ
ACCUMULATOR_RULES	YTO_VIEW	40	TO
CO_EARN_DED_RULE	DB_VIEW	22	B

TABLE NAME	VIEW NAME	POINTER	TABLE REF
COMPANY_ROE	DCAM_VIEW	23	AM
COMPANY_XREF	YT_R_VIEW	40	T*R
DISCRIMINATION_TST	YTV_VIEW	40	TV
EEO_STATISTICS	YTY_VIEW	40	TY
EMP_EARN_DED_MM	QH_VIEW	32	QH
EMP_LOCATION_LH	NG_VIEW	31	NG
EMP_LOCATION_MM	QG_VIEW	31	QG
EMP_NAME_ADDR_LH	NF_VIEW	30	NF
EMP_NAME_ADDR_MM	QF_VIEW	30	QF
EMP_ROE_1	MLYA_VIEW	36	YA
EMP_ROE_2	MLYB_VIEW	36	YB
EMP_ROE_3	MLYC_VIEW	36	YC
EMP_ROE_4	MLYD_VIEW	36	YD
EMP_ROE_5	MLYE_VIEW	36	YE
EMP_TAX_DED	MJ_VIEW	34	MJ
EMP_TAX_DED_MM	QJ_VIEW	34	QJ
EMPLOYEE_LH	NEE_VIEW	29	NEE
EMPLOYEE_MM	QEE_VIEW	29	QEE
EMPLOYEE_PAYMT	MEEA_VIEW	29	EA
EMPLOYEE_PAYMT_LH	NEEA_VIEW	29	NEEA
EMPLOYEE_PAYMT_MM	QEEA_VIEW	29	QEEA
GL_ACCOUNT_NBRS	DCAK_VIEW	23	AK
LABOR_DIST_SPLIT1	NLG1_VIEW	36	NLG1
LABOR_DIST_SPLIT2	NLG2_VIEW	36	NLG2
LABOR_DIST_SPLIT3	NLG3_VIEW	36	NLG3
LABOR_HIS_EARN_DED	NH_VIEW	33	NH
LABOR_HIS_TAX_DED	NJ_VIEW	35	NJ
PAY_ALLOCATIONS	MG_VIEW	31	MG
PAY_DOC_PRINT	DCAL_VIEW	23	AL
PAY_PERIOD	MP_VIEW	37	MP
PAY_PROCESS_OPT	DCAF_VIEW	23	AF
PAY_STUB_MESSAGE1	DCAG_VIEW	23	AG
PAY_STUB_MESSAGE2	DCAH_VIEW	23	AH
PAYROLL_REPT_DEFN	DD_VIEW	24	D
PRIOR_YEAR_TOTAL	YTW__A_VIEW	40	TW A
PRIOR_YEAR_TOTAL_B	YTW__B_VIEW	40	TW B
TAX_SPECIFICATION	H_VIEW	25	H

TABLE NAME	VIEW NAME	POINTER	TABLE REF
TAX_TABLE_BRACKET	H5_VIEW	27	H5
TAX_TABLE_DEFN	H4_VIEW	26	H4

5---Systems Subject Area

TABLE NAME	VIEW NAME	POINTER	TABLE REF
CODESET	ZCSUNV_VIEW	NA	ZCSUN
CODESET_C12	ZCSC12_VIEW	NA	ZCSC1
COMPANY	D_VIEW	21	AA
DIDX	DIDX_VIEW	NA	RDB
EMPLOYEE	MEE_VIEW	29	E
F_OTHER_RECORD	F_VIEW	39	F
FIELD_NAMES	Y40FN_VIEW	40	40FN
G_OTHER_RECORD	G_VIEW	39	G
HIDX	HIDX_VIEW	NA	RDB
MIDX	MIDX_VIEW	NA	RDB
NIDX	NIDX_VIEW	NA	RDB
QIDX	QIDX_VIEW	NA	RDB
V80_BENEFIT	MLPD_VIEW	36	PD
V80_INJURY_DISABLE	MLPR_VIEW	36	PR
V80_INSURANCE	MLPB_VIEW	36	PB
V80_MED_COVERAGE	MLPC_VIEW	36	PC
W_OTHER_RECORD	W_VIEW	39	W
X_OTHER_RECORD	X_VIEW	39	X

6---Distributed Administration Subject Area

TABLE NAME	VIEW NAME	POINTER	TABLE REF
DISTRIB_ACCESS_LOG	YUDS3_VIEW	40	UDS3
DISTRIBUTION_RULES	YUDS4_VIEW	40	UDS4
MACHINE_PARAMETERS	YUDS2_VIEW	40	UDS2
NODE_CONTROL_TABLE	YUDS1_VIEW	40	UDS1

Tables by Pointer and Table Reference

NA	RDB	DIDX	DIDX_VIEW
NA	RDB	HIDX	HIDX_VIEW
NA	RDB	MIDX	MIDX_VIEW
NA	RDB	NIDX	NIDX_VIEW
NA	RDB	QIDX	QIDX_VIEW
NA	ZCSC1	CODESET_C12	ZCSC12_VIEW
NA	ZCSUN	CODESET	ZCSUNV_VIEW
21	AA	COMPANY	D_VIEW
22	B	CO_EARN_DED_RULE	DB_VIEW
23	AF	PAY_PROCESS_OPT	DCAF_VIEW
23	AG	PAY_STUB_MESSAGE1	DCAG_VIEW
23	AH	PAY_STUB_MESSAGE2	DCAH_VIEW
23	AJ	PAY_FREQUENCY	DCAJ_VIEW
23	AK	GL_ACCOUNT_NBRS	DCAK_VIEW
23	AL	PAY_DOC_PRINT	DCAL_VIEW
23	AM	COMPANY_ROE	DCAM_VIEW
24	D	PAYROLL_REPT_DEFN	DD_VIEW
25	H	TAX_SPECIFICATION	H_VIEW
26	H4	TAX_TABLE_DEFN	H4_VIEW
27	H5	TAX_TABLE_BRACKET	H5_VIEW
29	E	EMPLOYEE	MEE_VIEW
29	EA	EMPLOYEE_PAYMT	MEEA_VIEW
29	EB	EMPLOYEE_TRANSFER	MEEB_VIEW
29	NEE	EMPLOYEE_LH	NEE_VIEW
29	NEEA	EMPLOYEE_PAYMT_LH	NEEA_VIEW
29	QEE	EMPLOYEE_MM	QEE_VIEW
29	QEEA	EMPLOYEE_PAYMT_MM	QEEA_VIEW
30	MF	NAME_ADDRESS	MF_VIEW
30	NF	EMP_NAME_ADDR_LH	NF_VIEW
30	QF	EMP_NAME_ADDR_MM	QF_VIEW
31	MG	PAY_ALLOCATIONS	MG_VIEW
31	NG	EMP_LOCATION_LH	NG_VIEW
31	QG	EMP_LOCATION_MM	QG_VIEW

32	MH	EMP_EARN_DED	MH_VIEW
32	QH	EMP_EARN_DED_MM	QH_VIEW
33	NH	LABOR_HIS_EARN_DED	NH_VIEW
34	MJ	EMP_TAX_DED	MJ_VIEW
34	QJ	EMP_TAX_DED_MM	QJ_VIEW
35	NJ	LABOR_HIS_TAX_DED	NJ_VIEW
36	01	DEPENDENT	MLO1_VIEW
36	02	DEPENDENT_EMPLYR	MLO2_VIEW
36	03	DEPENDENT_INSUR	MLO3_VIEW
36	08	EEO_6	MLO8_VIEW
36	0Z	EMP_FLEX_PLN_CR_PR	MLOZ_VIEW
36	NLG1	LABOR_DIST_SPLIT1	NLG1_VIEW
36	NLG2	LABOR_DIST_SPLIT2	NLG2_VIEW
36	NLG3	LABOR_DIST_SPLIT3	NLG3_VIEW
36	O4	EMRGY_CONTACT	MLO4_VIEW
36	O5	EMRGY_CONTACT_ADDR	MLO5_VIEW
36	O6	EMRGY_PHYSICIAN	MLO6_VIEW
36	O7	EMRGY_PHYS_ADDR	MLO7_VIEW
36	OA	BENEFICIARY	MLOA_VIEW
36	OB	BENEFICIARY_ADDR	MLOB_VIEW
36	OC	BENEFICIARY_CITY	MLOC_VIEW
36	OD	COVERED_DEPENDENTS	MLOD_VIEW
36	OF	APPLICANT	MLOF_VIEW
36	OG	APPLCNT_REFERENCE	MLOG_VIEW
36	OH	APPLCNT_REF_ADDR	MLOH_VIEW
36	OI	JOB_APPLIED_FOR	MLOI_VIEW
36	OJ	WORK_PREFERENCES	MLOJ_VIEW
36	PB	V80_INSURANCE	MLPB_VIEW
36	PC	V80_MED_COVERAGE	MLPC_VIEW
36	PD	V80_BENEFIT	MLPD_VIEW
36	PH	SALARY_CHANGE	MLPH_VIEW
36	PM	EMP_INCUMBENCY	MLPM_VIEW
36	PQ	CAN_EMP_EQUITY	MLPQ_VIEW
36	PR	V80_INJURY_DISABLE	MLPR_VIEW
36	Q0	EMP_FLEX_CREDITS	MLQO_VIEW
36	Q0	EMP_RETIREMENT	MLQ0_VIEW
36	Q1	EMP_WELFARE_PLAN	MLQ1_VIEW
36	Q2	LEAVE_OF_ABSENCE	MLQ2_VIEW

36	Q3	EMP_PLAN_SERVICE	MLQ3_VIEW
36	Q4	EMP_DEFERRED_PLAN	MLQ4_VIEW
36	Q5	EMP_PLAN_CONTRIB	MLQ5_VIEW
36	Q6	PENSION_BENEFIT	MLQ6_VIEW
36	Q7	PENSION_PROJCTION	MLQ7_VIEW
36	Q8	EMP_PLAN_COVERAGE	MLQ8_VIEW
36	Q9	EMP_PLAN_VESTING	MLQ9_VIEW
36	QA	TS_FUND_ALLOCATION	MLQA_VIEW
36	QB	TS_FUND_ACCUM	MLQB_VIEW
36	QC	TS_FUND_ACTIVITY	MLQC_VIEW
36	QD	TS_FUND_TRANSFER	MLQD_VIEW
36	QE	DC_CONTRIBUTION	MLQE_VIEW
36	QF	TS_FUND_BALANCE_1	MLQF_VIEW
36	QG	TS_FUND_BALANCE_2	MLQG_VIEW
36	QH	TS_FUND_SHARE	MLQH_VIEW
36	QI	DB_PLAN_ACCUM	MLQI_VIEW
36	QJ	DB_ACCT_BALANCE	MLQJ_VIEW
36	QK	DB_ACCT_ACTIVITY	MLQK_VIEW
36	QL	DC_PLAN_ACCUM	MLQL_VIEW
36	QM	DC_ACCT_ACTIVITY	MLQM_VIEW
36	QN	DC_ACCT_TRANSFER	MLQN_VIEW
36	QP	DC_ACCT_BALANCE_1	MLQP_VIEW
36	QQ	DC_ACCT_BALANCE_2	MLQQ_VIEW
36	QR	AVG_DEFERRAL_PCT	MLQR_VIEW
36	QS	BENEFICIARY_PCT	MLQS_VIEW
36	QT	FSA_ACCT_BALANCE	MLQT_VIEW
36	QU	FSA_CLAIM	MLQU_VIEW
36	QV	HIGHLY_PAID_DEF_1	MLQV_VIEW
36	QW	HIGHLY_PAID_DEF_2	MLQW_VIEW
36	QX	FINAL_AVG_EARNINGS	MLQX_VIEW
36	QY	COBRA_QUALIFY_EVNT	MLQY_VIEW
36	QZ	J_S_BENEFIT_WAIVER	MLQZ_VIEW
36	R0	SHARE_DISTRIBUTION	MLR0_VIEW
36	R0	TEMP_LIVING_EXP	MLRO_VIEW
36	R1	SHARE_WITHDRAWAL	MLR1_VIEW
36	R2	SHARE_ACCT_BALANCE	MLR2_VIEW
36	R3	STOCK_CASH_BALANCE	MLR3_VIEW
36	R4	SAVINGS_BOND	MLR4_VIEW

36	R5	ALT_COMP_TOTALS	MLR5_VIEW
36	RA	EMP_ELIGIBILITY	MLRA_VIEW
36	RD	DISCIPLINE_ACTION	MLRD_VIEW
36	RJ	RELOCATION_1	MLRJ_VIEW
36	RK	RELOCATION_2	MLRK_VIEW
36	RL	RELOCATION_3	MLRL_VIEW
36	RM	HOUSE_HUNTING_EXP	MLRM_VIEW
36	RN	MOVING_EXPENSE	MLRN_VIEW
36	RP	SHIPPING_EXP	MLRP_VIEW
36	RQ	CLOSING_COST_EXP	MLRQ_VIEW
36	RR	BRIDGE_LOAN	MLRR_VIEW
36	RS	POSITION_ASSIGNMT	MLRS_VIEW
36	RT	AUTH_TIME_OFF	MLRT_VIEW
36	RU	UNAUTH_TIME_OFF	MLRU_VIEW
36	T0	EMP_CLASS_REG	MLT0_VIEW
36	T1	EMP_TRAIN_REQ	MLT1_VIEW
36	T2	EMP_CLASS_RESULT	MLT2_VIEW
36	T3	EMP_COURSE_OBJ	MLT3_VIEW
36	T4	EMP_TRAIN_SALARY	MLT4_VIEW
36	T5	EMP_CLASS_COST	MLT5_VIEW
36	TB	ISSUED_BADGE	MLTB_VIEW
36	TS	SCHEDULE_ASSIGNMNT	MLTS_VIEW
36	VA	ABSENCE	MLVA_VIEW
36	VE	EEO_4_EXEMPTIONS	MLVE_VIEW
36	VG	GRIEVANCE	MLVG_VIEW
36	WA	IMAGE_INFORMATION	MLWA_VIEW
36	WF	EMPLOYEE_CONTACT	MLWF_VIEW
36	YA	EMP_ROE_1	MLYA_VIEW
36	YB	EMP_ROE_2	MLYB_VIEW
36	YC	EMP_ROE_3	MLYC_VIEW
36	YD	EMP_ROE_4	MLYD_VIEW
36	YE	EMP_ROE_5	MLYE_VIEW
36	Z0	PROFESSIONAL_ASSOC	MLZO_VIEW
36	Z1	FORMAL_EDUCATION	MLZ1_VIEW
36	Z2	TUITION_REIMBURSMT	MLZ2_VIEW
36	Z3	EMP_TRAIN_COURSE	MLZ3_VIEW
36	Z4	EMP_SKILL	MLZ4_VIEW
36	Z5	APPL_INTERVIEW	MLZ5_VIEW

36	Z6	PRIOR_EMPLOYMENT	MLZ6_VIEW
36	Z7	PHYSICAL_EXAM	MLZ7_VIEW
36	Z8	PHYSICAL_EXAM_RSLT	MLZ8_VIEW
36	Z9	APPL_PRE_TRANSFER	MLZ9_VIEW
36	ZA	EMPLOYEE_1	MLZA_VIEW
36	ZB	CITIZENSHIP	MLZB_VIEW
36	ZC	EMPLOYMT_ACTIVITY	MLZC_VIEW
36	ZD	JOB_ASSIGNMENT	MLZD_VIEW
36	ZE	BONUS	MLZE_VIEW
36	ZF	SALARY	MLZF_VIEW
36	ZG	PERFORMANCE_RATING	MLZG_VIEW
36	ZH	NON_MONETARY_PERQ	MLZH_VIEW
36	ZI	ASSIGNED_PROPERTY	MLZI_VIEW
36	ZJ	ASSIGNED_AUTO	MLZJ_VIEW
36	ZK	EXIT_INTERVIEW	MLZK_VIEW
36	ZL	DRIVERS_LICENSE	MLZL_VIEW
36	ZM	HEALTH_CONDITION	MLZM_VIEW
36	ZN	CERTIFICATION	MLZN_VIEW
36	ZP	PLANNED_SALARY	MLZP_VIEW
36	ZQ	SALARY_REVIEW	MLZQ_VIEW
36	ZR	EMP_LOCATION	MLZR_VIEW
36	ZS	SCHEDULED_APPRSL	MLZS_VIEW
36	ZT	MONETARY_PERQ	MLZT_VIEW
37	MP	PAY_PERIOD	MP_VIEW
39	F	F_OTHER_RECORD	F_VIEW
39	G	G_OTHER_RECORD	G_VIEW
39	W	W_OTHER_RECORD	W_VIEW
39	X	X_OTHER_RECORD	X_VIEW
40	40FN	FIELD_NAMES	Y40FN_VIEW
40	PR0	POSITION_HEADER	YPR0_VIEW
40	PR1	POSITION_CTL_BASIC	YPR1_VIEW
40	PR2	POSITION_FROM_DATA	YPR2_VIEW
40	PR3	POSITION_TO_DATA	YPR3_VIEW
40	PR5	POSITION_DEPT	YPR5_VIEW
40	PR7	POSITION_ACTUAL	YPR7_VIEW
40	PR8	POSITION_REQ	YPR8_VIEW
40	PR9	POSITION_INCUMBENT	YPR9_VIEW
40	PR9	POSITION_NARRATIVE	YPR4_VIEW

40	PRH	POSITION_CTRL_HDR	YPRH_VIEW
40	PRS	POSITION_CTL_SKILL	YPRS_VIEW
40	PRS	POSITION_SKILLS	YT0A05_VIEW
40	T!	ACCRUAL_SELECTION	YT_VIEW
40	T!ARA	ACCRUAL_ROUTINE	YT_ARA_VIEW
40	T!ARB	ACCRUAL_ROUTINE_B	YT_ARB_VIEW
40	T!ARC	ACCRUAL_ROUTINE_C	YT_ARC_VIEW
40	T*A	COURSE_DEVP_COST	YT_A_VIEW
40	T*C A	COORDINATOR	YT_C_A_VIEW
40	T*C B	COORDINATOR_B	YT_C_B_VIEW
40	T*C C	COORDINATOR_C	YT_C_C_VIEW
40	T*C D	COORDINATOR_D	YT_C_D_VIEW
40	T*C E	COORDINATOR_E	YT_C_E_VIEW
40	T*D A	COURSE_OFFERING	YT_D_A_VIEW
40	T*D B	COURSE_OFFERING_B	YT_D_B_VIEW
40	T*D C	COURSE_OFFERING_C	YT_D_C_VIEW
40	T*D D	COURSE_OFFERING_D	YT_D_D_VIEW
40	T*D E	COURSE_OFFERING_E	YT_D_E_VIEW
40	T*D F	COURSE_OFFERING_F	YT_D_F_VIEW
40	T*N A	COURSE_PROVIDER	YT_N_A_VIEW
40	T*N B	COURSE_PROVIDER_B	YT_N_B_VIEW
40	T*N C	COURSE_PROVIDER_C	YT_N_C_VIEW
40	T*N D	COURSE_PROVIDER_D	YT_N_D_VIEW
40	T*N E	COURSE_PROVIDER_E	YT_N_E_VIEW
40	T*P A	PROGRAM_SCHEDULE	YT_P_A_VIEW
40	T*P B	PROGRAM_SCHEDULE_B	YT_P_B_VIEW
40	T*P C	PROGRAM_SCHEDULE_C	YT_P_C_VIEW
40	T*P D	PROGRAM_SCHEDULE_D	YT_P_D_VIEW
40	T*P E	PROGRAM_SCHEDULE_E	YT_P_E_VIEW
40	T*P F	PROGRAM_SCHEDULE_F	YT_P_F_VIEW
40	T*R	COMPANY_XREF	YT_R_VIEW
40	T*S A	CLASS_SCHEDULE	YT_S_A_VIEW
40	T*S B	CLASS_SCHEDULE_B	YT_S_B_VIEW
40	T*S C	CLASS_SCHEDULE_C	YT_S_C_VIEW
40	T*S D	CLASS_SCHEDULE_D	YT_S_D_VIEW
40	T*S E	CLASS_SCHEDULE_E	YT_S_E_VIEW

40	T*T	TRAINING_REQUIRED	YT_T_VIEW
40	T*X	CANCEL_COURSE_BOOK	YT_X_VIEW
40	T*Y	CLASS_EVALUATION	YT_Y_VIEW
40	T*Z	COURSE_BOOKING	YT_Z_VIEW
40	T<AB	ABSENCE_EARN_CODE	YT_AB_VIEW
40	T<C2A	CREW_ROTATION_08_A	YT_C2A_VIEW
40	T<C2B	CREW_ROTATION_08_B	YT_C2B_VIEW
40	T<C2C	CREW_ROTATION_08_C	YT_C2C_VIEW
40	T<C3A	CREW_ROTATION_14_A	YT_C3A_VIEW
40	T<C3B	CREW_ROTATION_14_B	YT_C3B_VIEW
40	T<C3C	CREW_ROTATION_14_C	YT_C3C_VIEW
40	T<C3D	CREW_ROTATION_14_D	YT_C3D_VIEW
40	T<EC	TA_EARN_CODE	YT_EC_VIEW
40	T<P=	POLICY_ACTIVITY	YT_P_VIEW
40	T<PT	POLICY_TABLE	YT_PT_VIEW
40	T<S=	SCHEDULE_ACTIVITY	YT_S_VIEW
40	T<SP	SHIFT_PREMIUM	YT_SP_VIEW
40	T<ST	SCHEDULE_TABLE	YT_ST_VIEW
40	T0A01	POSITION_BASIC	YT0A01_VIEW
40	T0A02	POSITION_BASIC_02	YT0A02_VIEW
40	T0A03	POSITION_EVAL	YT0A03_VIEW
40	T0A04	POSITION_EVAL_CRIT	YT0A04_VIEW
40	T0A06	POSITION_MEMBERSHIP	YT0A06_VIEW
40	T0A07	POSITION_LICENSES	YT0A07_VIEW
40	T0A08	POSITION_EDUCATION	YT0A08_VIEW
40	T0A10	POSITION_DOC_REF	YT0A10_VIEW
40	T0A11	POSITION_REQ_EXP	YT0A11_VIEW
40	T0A12	POSITION_MISC_DATA	YT0A12_VIEW
40	T0A13	POSITION_REQ_TRAIN	YT0A13_VIEW
40	T0A50	POSITION_STATUS	YT0A50_VIEW
40	T0A51	POSITION_LOCATION	YT0A51_VIEW
40	T0A52	POSITION_FUND	YT0A52_VIEW
40	T0A53	POSITION_VEHICLE	YT0A53_VIEW
40	T0A54	POSITION_NEXT_REVW	YT0A54_VIEW
40	T0A55	POSITION_FTE	YT0A55_VIEW
40	T0A56	POSITION_COMPLEMNT	YT0A56_VIEW
40	T0B01	ORG_UNIT_BASIC	YT0B01_VIEW

40	T0B02	ORG_UNIT_LVL_NAME	YT0B02_VIEW
40	T0B03	ORG_UNIT_FTE	YT0B03_VIEW
40	T0B10	ORG_UNIT_DOC_REF	YT0B10_VIEW
40	T0B99	ORG_UNIT_DEF_NAME	YT0B99_VIEW
40	T0D01	JOB_BASIC	YT0D01_VIEW
40	T0D02	JOB_BASIC_02	YT0D02_VIEW
40	T0D03	JOB_EVALUATION	YT0D03_VIEW
40	T0D04	JOB_EVAL_CRIT	YT0D04_VIEW
40	T0D05	JOB_SKILLS	YT0D05_VIEW
40	T0D06	JOB_MEMBERSHIP	YT0D06_VIEW
40	T0D07	JOB_LICENSES	YT0D07_VIEW
40	T0D08	JOB_EDUCATION	YT0D08_VIEW
40	T0D09	JOB_NEXT_JOB	YT0D09_VIEW
40	T0D10	JOB_DOC_REF	YT0D10_VIEW
40	T0D11	JOB_REQ_EXP	YT0D11_VIEW
40	T0D13	JOB_REQ_TRAINING	YT0D13_VIEW
40	TA A	JOB_CODE	YTA__A_VIEW
40	TA B	JOB_CODE_B	YTA__B_VIEW
40	TBA	SALARY_GRADE_ANN	YTBA_VIEW
40	TBB	SALARY_GRD_PAY_PD	YTBB_VIEW
40	TBC	SALARY_GRADE_HRLY	YTBC_VIEW
40	TC A	JOB_EVAL_PROFILE	YTC__A_VIEW
40	TC B	JOB_EVAL_PROFILE_B	YTC__B_VIEW
40	TDC1	SALARY_INC_DEFN_1	YTDC1_VIEW
40	TDC2	SALARY_INC_DEFN_2	YTDC2_VIEW
40	TDC3	SALARY_INC_DEFN_3	YTDC3_VIEW
40	TDC4	SALARY_INC_DEFN_4	YTDC4_VIEW
40	TDR1	SALARY_INC_DEFN_5	YTDR1_VIEW
40	TDR2	SALARY_INC_DEFN_6	YTDR2_VIEW
40	TDR3	SALARY_INC_DEFN_7	YTDR3_VIEW
40	TDR4	SALARY_INC_DEFN_8	YTDR4_VIEW
40	TDT1	SALARY_INC_DEFN_9	YTDT1_VIEW
40	TDT2	SALARY_INC_DEFN_0	YTDT2_VIEW
40	TE	OCCUPATION_GROUP	YTE_VIEW
40	TF	ADJ_EMP_STATUS	YTF_VIEW
40	TG	SYSTEM_OPTIONS	YTG_VIEW
40	TH	SALARY_PLAN	YTH_VIEW
40	TI	SALARY_GRADE	YTI_VIEW

40	TJ A	PLAN_RETIRE_RULE	YTJ__A_VIEW
40	TJ B	PLAN_RETIRE_RULE_B	YTJ__B_VIEW
40	TK A	BENEFIT_PLAN	YTK__A_VIEW
40	TK B	BENEFIT_PLAN_B	YTK__B_VIEW
40	TL	PLAN_ELIGIBILITY	YTL_VIEW
40	TM	COVERAGE_COST	YTM_VIEW
40	TN A	PLAN_PARTICIPATE	YTN__A_VIEW
40	TN B	PLAN_PARTICIPATE_B	YTN__B_VIEW
40	TO	ACCUMULATOR_RULES	YTO_VIEW
40	TOA09	POSITION_NEXT_JOB	YT0A09_VIEW
40	TP	MASTER_PLAN	YTP_VIEW
40	TQ	ANNUITANT_FACTOR	YTQ_VIEW
40	TRA	PLAN_INTEREST_RATE	YTRA_VIEW
40	TRB	FUND_INTEREST_RATE	YTRB_VIEW
40	TRC	PLAN_ALLOC_METHOD	YTRC_VIEW
40	TRD	FUND_ALLOC_METHOD	YTRD_VIEW
40	TS	PLAN_EARN_DED_RULE	YTS_VIEW
40	TT	PLAN_OPT_ACTIVITY	YTT_VIEW
40	TU A	BREAK_IN_SVC_RUL	YTU__A_VIEW
40	TU B	BREAK_IN_SVC_RUL_B	YTU__B_VIEW
40	TV	DISCRIMINATION_TST	YTV_VIEW
40	TW A	PRIOR_YEAR_TOTAL	YTW__A_VIEW
40	TW B	PRIOR_YEAR_TOTAL_B	YTW__B_VIEW
40	TX A	EEO_ESTABLISHMNT	YTX__A_VIEW
40	TX B	EEO_ESTABLISHMNT_B	YTX__B_VIEW
40	TX C	EEO_ESTABLISHMNT_C	YTX__C_VIEW
40	TX D	EEO_ESTABLISHMNT_D	YTX__D_VIEW
40	TX E	EEO_ESTABLISHMNT_E	YTX__E_VIEW
40	TY	EEO_STATISTICS	YTY_VIEW
40	TZ	COVERAGE_COST_B	YTZ_VIEW
40	TZAX	HR_TABLE_CTRL	YTZAX_VIEW
40	TZAY	BENEFIT_TABLE_CTRL	YTZAY_VIEW
40	TZAZ	ACCRUAL_TABLE_CTRL	YTZAZ_VIEW
40	U1	FLEX_CREDIT_CALC	YU1_VIEW
40	U2	FLEX_PLAN_OPTS	YU2_VIEW
40	UDS1	NODE_CONTROL_TABLE	YUDS1_VIEW

40	UDS2	MACHINE_PARAMETERS	YUDS2_VIEW
40	UDS3	DISTRIB_ACCESS_LOG	YUDS3_VIEW
40	UDS4	DISTRIBUTION_RULES	YUDS4_VIEW
40	URT01	REQ_BASIC_DETAILS	YURT01_VIEW
40	URT11	REQ_CAND_BASIC	YURT11_VIEW
40	URT12	REQ_CAND_BASIC_2	YURT12_VIEW
40	WPFP	POSITION_BUDGET_PC	YPR6_VIEW

APPENDIX C

Operating System Codes

In This Appendix

Operating System Codes

Operating System Codes are often required by The Solution Series to distinguish unique characteristics for your environment. For example, the program PULL uses Operating System Codes.

Manufacturer	Code	Environment	Counter Length
UNIX	MFE	UNIX Oracle	4
NT	MFJ	NT SQL Server	4

Database Operating Codes

The Solution Series uses database operating codes to extract the appropriate database syntax to create the database.

Manufacturer	CBSV PULL Code	CASE Tool Code
Oracle	MFE	MF2ORA
SQL Server	MFJ	MF2SQL

APPENDIX D

Object Codes

In This Appendix

System Control Repository Object Codes

Object Codes are required for several Solution Series programs to select specific System Control Repository records for processing. Programs that require an Object Code are DISPLY, COPY, EDIT, PURGE, and EXPORT.

Not all records on FILE01 are accessible by using these programs. A complete list of records on FILE01 can be found later in this appendix.

Object	Object Description
A	A Records (Machine Parameters)
B	B Records (Expansion Records)
C	Option List Records
C/C	Option List with Country Code
C/D	Option List Documentation
C/M	Option List Calculation Code
C/R	Option List Edits Code
C/V	Option List Values
D	Default Records—LDEFAULT
ECM	Context Menus
EPM	Position Administration Navigation
ETL	RDBMS View Names
EXT	PAYXTR/PAYMRG Select
F	Field Table Entries
F/D	Field Table Documentation
FS	Field Security
F/V	Verbs
F1	Field Entry
FTM	Field Table Menu
FTX	Field Table Cross Reference
J	Journal Records
MCL	Client Data File Updates
MMN	GUI Records
P	P Records
P/	P Records—Cyborg Scripting Language (English Language) Source
P-X	P Records—Except Object Records
P/C	P Records—Form Chaining Records
P/D	P Records—Hypertext Titles
P/E	P Records—Reload Messages

Object	Object Description
P/G	P Records—Cyborg Scripting Language (English Language) Source generated
P/H	P Records—PTF History
P/J	P Records—Sample JCL
P/K	P Records—Alt Lang Menu
P/L	P Records—Menu List
P/M	P Records—Documentation
P/N	P Records—Alt Lang Doc
P/Q	P Records—Alt Lang Error Message
P/R	P Records—Error Messages
P/S	P Records—Form Items Table
P/T	P Records—Test Data
P/W	P Records—Assembler Source
P/X	P Records—Object Code
PC	C12RPT—Organization Inclusion List Records
PD	RUNC12—Organization Report Scheduling Records
PE	RUNREP—Report Group Records
PI	Variant Country Form Records
PX	Objects
PXH	Edit Heading
PXS	OBJ/ACT Security
Q	Alternate Key Records
QRY	Solution View Query Source
R	R Records
RPT	Report
RQM	Solution View Query Specifications
RRM	Solution View Report Specifications
RS	Report Source
RSM	Solution View Form Specifications
RT	Report Output Position/Totaling Records
RXM	Solution View Extract Specifications
SCR	Solution View Form Source
SRC	Cyborg Scripting Language (English Language) Source (All)
T	Table Records
XRF	Solution View X-Ref. Records
XTR	Solution View Extract Source

Object	Object Description
Y	Security Records
Y/V	Security Violation Records
ZE	SQL Errors
ZL	Locked Records

Object Codes---Quick Solution

Use this Quick Solution to determine what functions are available for an object:

OBJECT	Object Description	OBJECT-KEY	Example	Pos.	COPY	DISPLY	PURGE	EXPORT	EDIT
A	A Records Machine Parameters	Blank				D		X	E
B	B Records Expansion Records	Blank				D		X	E
C	Option list Records	Option list Name	HR09b, HR0= =	5	C	D	P	X	E
C/C	Option list with Country Code	Option list Name	1PP488=	6	C	D	P	X	E
C/D	Option list Documentation and Values	Option list Name	HR09b, HR0= =	5		D		X	E
C/M	Option list Calculation Code	Option list Name	BA31b, BA0= =	5		D		X	E
C/R	Option list Edits Code	Option list Name	BA31b, BA0= =	5		D		X	E
C/V	Option list Values	Option list Name	PP429, PR0= =	5		D		X	E
D	Default Records—LDEFAULT	Organization Control Number	999999	6		D	P	X	E
ECM	Context Menus	Blank				D		X	E
EPM	Position Management Navigation	Blank				D		X	E
ETL	RDBMS View Names					D		X	

EXT	PAYXTR/PAYMRG Select				C	D	P	X	E
F	Field Table Entries	Field Name	ANNUAL-SALARY	up to 20		D			E
F/D	Field Table Documentation	Field Name	ANNUAL-SALARY	up to 20		D		X	E
FS	Field Security	Field Name	ANNUAL-SALARY	up to 20		D			E
F/V	Verbs	Verb	FIND-ACTIVITY	up to 20		D		X	E
F1	Field Entry	Field Name	ANNUAL-SALARY	up to 20	C	D	P	X	E
FTM	Field Table Menu	Blank				D		X	E
FTX	Field Table Cross Reference	Blank				D		X	E
J	Journal Records	Blank					P	X	
MCL	FILECL Updates	Blank				D	P	X	
MMN	GUI Records	Blank				D	P	X	
P	P Records	Name of Program	1A-RPT	6	C	D	P	X	
P-X	P Records—Except Object Records	Name of Program	1A-RPT	6	C	D		X	
P/	P Records—Cyborg Scripting Language (English Language) Source	Name of Program	1A-RPT	6	C	D	P	X	E

P/C	P Records—Form Chaining Records	Name of Form Chain Series	NEWHRE, TERMS	up to 6	C	D	P	X	E
P/D	Hypertext Files	Names of Program	EF-SCR	6	C	D	P	X	E
P/E	P Records—Reload Messages	Name of Program	8-RPT, EE-SCR	6		D	P	X	E
P/G	Cyborg Scripting Language (English Language) Source generated	Name of Program	EF-SCR	6	C	D	P	X	E
P/H	PTF History	Name of Program	EF-SCR	6	C	D	P	X	E
P/J	P Records—Sample JCL	Name of Program or JCLxxx where xxx is the Operating System Code	REPORT, QUERY, JCLVAX	6	C	D	P	X	E
P/K	Alt Language Menu	Name of Program	PRMAIN	6	C	D	P	X	E
P/L	P Records—Menu List	Name of Menu	PRMAIN, MAINbb, Ba= = = =	6	C	D	P	X	E
P/M	P Records—Documentation	Name of Program	EE-SCR	6	C	D	P	X	E
P/N	Alt Language Doc.	Name of Program	EF-SCR	6	C	D	P	X	E
P/Q	Alt. Language Error Message	Name of Program	ERRSCR	6	C	D	P	X	E

P/R	P Records—Error Messages	ERRxxy where xx is the Module Code and y is the error type (R=Reject, W=Warning, M=Memo)	ERRHRW, ERRBAR, ERRPRM	6	C	D	P	X	E
P/S	Form Items Table	Name of Form Program	01-SCR	6	C	D	P	X	E
P/T	P Records—Test Data	Name of Test File	HRDEMO	6	C	D	P	X	E
P/W	P Records—Assembler Source	Name of Program	CYBWCI	6	C	D	P	X	E
P/X	P Records—Object Code	Name of Program	1A-RPT	6	C	D	P	X	E
PC	C12RPT—Organization Inclusion List Records	Organization Control Number	999999	6	C	D	P	X	
PD	RUNC12—Organization Report Scheduling Records	Report Group Name	WEEKLY	up to 6	C	D	P	X	
PE	RUNREP—Report Group Records	Report Group Name	WEEKLY	up to 6	C	D	P	X	
PI	Variant Country Form Records	Name of Program	EF-SCR	6	C	D	P	X	E
PX	Objects	Blank				D		X	E
PXH	EDIT Headings	Blank				D		X	E
PXS	OBJ/ACT Security	Blank				D		X	E
Q	Alternate Key Records	Alternate Key or Phonetic Key	00, PE	2		D	P	X	E

QRY	Solution View Query Source	Name of Query	XINTRO	6	C	D	P	X	
R	R Records								
RPT	Report	Name of Report	1A-RPT	6	C		P	X	
RQM	Solution View Query Specifications	Name of Query	XINTRO	6	C	D	P	X	
RRM	Solution View Report Specifications	Name of Report	XINTRO	6	C	D	P	X	
RS	Report Source	Name of Report	1A-RPT	6	C	D	P	X	
RSM	Solution View Form Specifications	Name of Form	XMYSCR	6	C	D	P	X	
RT	Report Output Position/Totaling Records	First four positions of Report Name	1A-R	4	C	D	P	X	
RXM	Solution View Extract Specifications	Name of Extract	XINTXT	6	C	D	P	X	
SCR	Solution View Form Source	Name of Form	XMYSCR	6	C	D	P	X	
SRC	Cyborg Scripting Language (English Language) Source (all)								
T	Table Records	Table ID and Control Number	A9999, K9999	5		D		X	
XRF	Solution View X-Ref. Records								
XTR	Solution View Extract Source	Name of Extract	XINTXT	6	C	D	P	X	
Y	Security Records					D		X	E

Y/V	Security Violation Records					D	P	X	
ZE	SQL Errors								
ZL	Locked Records	Organization Control Number, Master Record Type, Master Record Key	999999M12345 67890 999999D 999999HTXb101	up to 17		D	P	X	

APPENDIX E

Record Key Structures

In This Appendix

System Control Repository (Control File) key structure(s)

'A' records

The 'A' records contain the machine control cards and pointer fields unique to each operating system platform. These machine parameters include the pointer and system control information.

Key Structure	
Column(s)	**Value**
1	A (literal)
2	Blank
3–12	A COMPUTER (literal) (First record only—subsequent records equal B followed by the matching tailor code and program name)
25–27	Operating system code of computer being used

Object	Object Description
A	A Records (Machine Parameters)

'B' records

The 'B' records contain the Working Storage Expansion Parameters that are used when the CBSV programs are created. The working storage areas are defined the same way for both CBSVO and CBSVB. Over time, the areas will need to be expanded to accommodate the size of your company's Employee and Company information. The 'B' records contain the information the system needs to expand these areas.

Key Structure	
Column(s)	**Value**
1	B (literal)
2–7	Sequence Number

Object	Object Description
B	B Records (Expansion Records)

'C' records

The 'C' records contain the Option list values and description (value translation) for fields using a code scheme. These values are used to validate data input into specific fields.

Key Structure	
Column(s)	**Value**
1	C (literal)
2	Country Code
3–7	Option List Name
8–21	Code Value
22–24	Sequence Number

Object	Object Description
C	Option List
C/D	Option List Description
C/M	Option List Calculation Code
C/R	Option List Edits Code
C/V	Option List Values

'D' records

The 'D' records contain defaults for form models which can be set up to contain pre-defined data. These are 'compiled' into form-image records that reside on the System Control Repository.

Key Structure	
Column(s)	**Value**
1	D (literal)
2–7	Organization Control Number Value
8–23	Form Key Fields and Data Fields

'ECM' records

The 'ECM' records contain a list of programs associated with the current form when using Position Administration.

Key Structure	
Column(s)	**Value**
1	E (literal)
2–3	CM (literal)
4–9	Current Program ID
10	Language Preference—Blank or 'A'
11–12	Tie Breaker
13–24	Spaces

'EPM' records

The 'EPM' records contain markers that indicate whether buttons on certain Position Administration forms are active or 'grayed out'.

Key Structure	
Column(s)	**Value**
1	E (literal)
2–3	PM (literal)
4–9	Current Program ID
10	Language indicator—blank or 'A'
11	Button ID
12	Incumbent form flag
13–24	Spaces

'ETL' records

The 'ETL' records contain information from the Relational Table Name Elements form.

Key Structure	
Column(s)	**Value**
1	E (literal)
2–3	TL (literal)
4–7	Option list Value
8–24	Blanks

'EXT' records

The 'EXT' records contain additional extract data requirement records.

Key Structure	
Column(s)	**Value**
1	E (literal)
2–3	XT (literal)
4–5	Payroll Processing Group (future use)
6–24	Table Name or ALL

'F' records

The 'F' records contain Cyborg's data dictionary called the Field Name Table. All data fields are defined here with their associated characteristic code and documentation. Each must have a unique name which is part of the Key to the Field Name record. Data Dictionary items include verbs, reserved words, fields, and file definitions.

Key Structure	
Column(s)	**Value**
1	F (literal)
2	Blank
3–22	Name of field, reserved word, file or verb
23–24	Sequence Number/Code

Object	Object Description
F	Field Table Entries
F/D	Field Table Documentation
F/S	Field Security
F/V	Verbs
F1	Field Entry
FTM	Field Table Menu
FTX	Field Table Cross Reference

'MCL' records

The 'MCL' records contain the updates needed for the Client Data File.

Key Structure	
Column(s)	**Value**
1–3	MCL (literal)
4–11	Date (ccyymmdd)
12–15	Time (hhmm)
16–19	Session number
20–23	Transaction number

'MML' records

The 'MML' records contain checklists.

Key Structure	
Column(s)	**Value**
1–3	MML (literal)
4–9	Checklist unique ID
10	Type (blank = normal checklist, 'D' = option dialog)
11–13	Sequence number
14–19	Name of the CSL form program

'MMN' records

The 'MMN' records contain the system menus that are placed into the menu bar.

Key Structure	
Column(s)	**Value**
1–3	MMN (literal)
4	Language Indicator (P=primary, A=alternate, B=Bitmap)
5–10	1st level sub menu number
11–13	2nd level sub menu number

'P' records

The 'P' records contain all source, object, documentation, error messages, and so forth for Cyborg Scripting Language forms, reports, and utilities that reside on the System Control Repository (Control File; FILE01) as program records.

Key Structure	
Column(s)	**Value**
1	P (literal)
2	Blank
3–8	File name
9	Record type
10–14	Sequence number
15	Sequence code

Object	Object Description
P	P Records
P–X	P Records—Except Object Records
P/	P Records—Cyborg Scripting Language source
P/E	P Records—Reload messages
P/H	P Records—Change history
P/J	P Records—ample JCL
P/L	P Records—Menu List
P/M	P Records—Documentation
P/R	P Records—Error message
P/T	P Records—Test data
P/W	P Records—Assembler source
P/X	P Records—Object code

Object	Object Description
RPT	Report
RS	Report source

Record Types	
Value	**Description**
Blank	Cyborg Scripting Language Source Code
A	Temporary use (P-RSEQ)
C	Form chain
D	Hypertext titles (version 3)
E	Reload messages
G	CSL source
H	PTF history
J	Sample Control Records and JCL
K	Alternate language menu
L	Menu list records
M	Documentation records
N	Alternate language documentation
Q	Alternate language error messages
R	Messages (Reject/Warning/Memo)
S	FormBuilder records
T	Demonstration (Test) data records
W	Cyborg Assembler Code
X	Object Code

'PC' records

Organization Inclusion List records are used to specify which reports are to be produced for each organization on your Employee Database. The C12RPT form is an optional form that will contain a list of valid reports for each organization. The REPORT program assumes all reports are valid for every organization unless the 'PC' (C12RPT Form) records are set up.

Key Structure	
Column(s)	**Value**
1–2	PC
3–8	Organization Control Number
9–14	Report Code
15	Blank
16–23	SECURITY verb

Object	Object Description
PC	Organization Inclusion List Records

'PD' records

Restricted Organization Report Scheduling Records are optional records, which are used to define which organizations are to be included in reporting, per the 'PE' record.

Key Structure	
Column(s)	**Value**
1–2	PD
3–8	Report Group Name
9–14	Organization Control Number
15–24	Organization Name

Object	Object Description
PD	Restricted Organization Report Scheduling Records

'PE' records

Report Group records are used to schedule reports. They must have a six-character file name that indicates the report job. 'PE' records are created through the Report Group Activities form and contain a list of reports to be run together. Some reports may require special dates or other parameters.

Header Record

Key Structure	
Column(s)	**Value**
1–2	PE
3–8	Report Group Name
9–23	blanks
24–65	Report Group Title
66–69	Operator ID or blanks

Key Structure	
Column(s)	**Value**
1–2	PE
3–8	Report Group Name
9–14	Report Code

Key Structure	
15–35	Report Parameters (ALLOCATE-AREA)

Object	Object Description
PE	Report Group Records

'PI' records

The 'PI' records contains the name of the form to execute when variant country forms are being used. This allows a constant form name to be used regardless of the country.

Key Structure	
Column(s)	**Value**
1–2	PI
3–8	Name of the CSL form program
9	Country code

Object	Object Description
PI	Variant country form

'PM' records

The 'PM' records are created by the POSTIT program and contain the message, sender, and receiver operator IDs. The READIT program displays the message and deletes the working copy. Once used, there will always be the PM records for each operator ID sending with the last messages sent.

Key Structure	
Column(s)	**Value**
1–2	PM
3–6	Sender's or receiver's operator ID
7	Message indicator
8–12	Date sent or received

'PP' records

The 'PP' records contain individual user default options such as which organization to display when signing on and the default menu to use. They are created by the Operator Options (MYOPTS) form.

Key Structure	
Column(s)	**Value**
1–2	PP

Key Structure	
3–6	Operator ID

'PR' records

The 'PR' records are Position Control Table records, which are used to access Position Control records.

Key Structure	
Column(s)	**Value**
1–2	Position control table ID
3–24	Position control table key fields

Object	Object Description
PR	Position control records
PX	Object security records

'Q' records

Alternate Key Records are index pointers created using the Master Record Key and other field information. These pointers allow the System Control Repository to access Employee Database records when a Query (online report) is executed.

Key Structure	
Column(s)	**Value**
1	Q (literal)
2–3	Key code
4–22	Key data
23–24	Duplicate Key indicator

Object	Object Description
Q01	Social Security Number
Q02	Employee Name
QID	Employee ID
QPE	Phonetic Keys

'R' records

The 'R' records are Report Format Records. When batch report source code is compiled, 'R' records are created on the System Control Repository.

Key Structure	
Column(s)	**Value**
1	R (literal)
2	Blank
3–7	Report Code and Type
8–9	Report Record Type

Object	Object Description
R	Report format records

'RFM' records

The 'RFM' records have a dual purpose. They contain the quick-reference menus used by WRITER and, for each employee and company segment, they contain the RDBMS table name.

Key Structure	
Column(s)	**Value**
1–3	RFM
4–5	Application indicator
6–7	Pointer number
8–9	Module code
10–11	Segment code

Object	Object Description
FTM	Field name table menu

'RFT' records

These records work in conjunction with the 'RFM' records and also have a dual purpose. They define the fields to be displayed on each quick reference menu for WRITER and specify if the field is to be defined to the RDBMS. A single field with numerous field definitions such as NAME, EMPLOYEE-NAME, EMPLOYEE-NAME-10, and so forth will all be available for WRITER, but only EMPLOYEE-NAME is tagged as a relational database field.

Key Structure	
Column(s)	**Value**
1–3	RFT
4–5	Pointer number
6–7	Module code

Key Structure	
8–9	Segment code
10–12	Blank
13–15	Displacement
16–18	Sequence number

Object	Object Description
FTX	Field name table cross-reference

'RQM', 'RRM', 'RSM', and 'RXM' records

These are Solution View Specification records created when WRITER is used to write a query (RQM), report (RRM), form (RSM), or extract (RXM). These records allow users to change their program with WRITER and have their original entries display.

Key Structure	
Column(s)	**Value**
1–3	RQM, RRM, RXM or RSM
4–9	Query Report Name (File name)
10	Record Type
11–13	Segment and Segment Code
14	Sequence Number
15–24	Field name

'RT' records

Report Output Position/Totaling Records are used to define output detail and total parameters for a report. Information on these records is used to obtain Field Name Table definitions for printing field data on the report.

Key Structure	
Column(s)	**Value**
1–2	RT
3–7	Report Code and Type
8–9	Sequence Number
10–28	Field Name

Object	Object Description
RT	Report Output Position/Totaling

'T', 'U', 'W', and 'X' records

Table Records contain static company information displayed for an employee record based on a code present on the Master Record. Records beginning with a T or U are Cyborg delivered. W and X records are user/consulting created tables. The best way to view table records is to execute the table form in Inquiry mode.

Key Structure	
Column(s)	**Value**
1–2	Table ID
3–24	Table Key fields (varies by table)

Object	**Object Description**
T	Cyborg delivered table records
U	Cyborg delivered table records
W	Consulting table records
X	User table records

'Y' records

Security records contain the security access for each individual sign-on sequence, as well as any security violations. Security Records have an encrypted key structure and are discussed in the Security Manual.

Object	**Object Description**
Y	Security Records
Y/V	Security Violation Records

'Z' records

The 'Z BACKUP' or 'Z BACKEM' records are written whenever the BACKUP or BACKEM programs are run and contain the date and time of the back up. The output is then used to run a DEMO01 to create a new FILE01. BACKUP is the version 3 PC version and BACKEM the mainframe version.

Key Structure	
Column(s)	**Value**
1–2	Z
3–8	'BACKUP' for version 3 PC DOS; 'BACKEM' for all others

'ZE' records

These are RDBMS error records. A ZE record is written whenever an error or informational message is encountered during execution of the DML statements by CBSV.

Key Structure	
Column(s)	**Value**
1–2	ZE
3–8	Organization Control Number

'ZL' records

These are temporary system generated records which cause a company or employee record to be locked to other users during an update process. This prevents multiple users from updating the same record at the same time.

Key Structure	
Column(s)	**Value**
1–2	ZL
3–8	Organization Control Number
9	Employee database record type

Object	Object Description
ZL	Locked Records

Employee Database layout

The first three characters are the three-byte binary record length. The first records stored in the Employee Database are always the P4CALC Report Generators.

The next records in the Employee Database are:

Record	Use
xxxxxx	Six-byte organization value (Organization Control Number).
xxxxxxD	Company records.
xxxxxxF	Company level 'Other' records—Cyborg: xxxxxxFB batch records for time entry xxxxxxFFK adjustments xxxxxxFFT used with time entry xxxxxxG Company level 'Other' records—User
xxxxxxHTX	Tax Authority records.
xxxxxxM	Employee records. The ten-position employee number follows the 'M'.
xxxxxxW	Company level 'Other' records—Cyborg.
xxxxxxX	Company level 'Other' records—User.
ZH	Created by Solution View, Time and Attendance, or Position Administration only, as needed. Key is session ID and a field name.
Z1/Z2	Created by secondary 'Window' display feature within the GUI.
ZI	IS/WAS audit records for re-engineered forms (except transaction records).
ZN	Scratch area storage records. This record is deleted by GOODBYE program. Format is ZNsssspppppnnnnn, where: ssss session number pppppp program name nnnnn P-E-PLACE value of pointer 44 at the time the SAVE-SCRATCH macro was issued
ZQ	Online pay calculation records PAY-CP.
ZR	Report viewing records. The rest of the key is OPID and three-digit VIEW sequence number.
ZV	Batch time entry records.
ZX	Executable code.
ZY	Session records . Created and restored on subsequent transactions by CYB88O. CYB90O updates this record before every form transaction.

Record	Use
ZZ	Form capture audit for non-Solution Series-ized forms and transaction forms.
ZZA	Online transactions for payroll.

Employee Database key structure(s)

Report Generator records

Report Generators reside first on the Employee Database and are stored in executable form only. Although Report Generators are used by the Payroll Process, they are maintained on the Employee Database for the purpose of performing an online pay calculation.

Key Structure	
Column(s)	**Value**
1–3	Binary record length
4–9	Report Generator Name

Company records

Company records contain information on the company name and address, company HEDs, control levels, pay frequencies, and pay run parameters.

Key Structure	
Column(s)	**Value**
1–3	Binary record length
4–9	Organization Control Number
10	Record Type (D)
11–31	Blanks

Company 'Other" records

Record Type can 'F' or 'G' for other records that follow the company header.

Key Structure	
Column(s)	**Value**
1–3	Binary record length
4–9	Organization Control Number
10	Record Type (Various)
11–35	Key data

Tax records

Tax records (Record Type 'H') contain the tax body data used to calculate the deductions for the pay cycle.

Key Structure	
Column(s)	**Value**
1–3	Binary record length
4–9	Organization Control Number

Key Structure	
10	Record Type (H)
11–13	TX_
14–20	Tax Body ID

Employee records

Employee records follow the corresponding company records for the Organization Control Number on the Employee Database. The information contained in the Employee Records includes name and address, labor split, HEDs, taxes, and human resources data.

Key Structure	
Column(s)	**Value**
1–3	Binary record length
4–9	Organization Control Number
10	Record Type (M)
11–20	Employee Number
21–22	History Unique (Binary or 99)

Employee 'Other' records

Record Type can 'W' or 'X' for other records that follow employee records.

Key Structure	
Column(s)	**Value**
1–3	Binary record length
4–9	Organization Control Number
10	Record Type (Various)
11–35	Key data

Online Pay Calc records

These are informational records created by the O4CALC program when the Calculate Pay form is executed. There are three ZQ records created for the Calculate Pay form. These are reused within the session, so only the last calculation is displayed. The three records created contain:

Record 1—Input fields from the Calculate Pay form.

Record 2—Card stack created from the Calculate Pay form data—Batch Card, Payroll Run Process Control form data, Timecard.

Record 3—Results of the calculation, for display.

Key Structure	
Column(s)	**Value**
1–3	Binary record length

Key Structure	
4–5	ZQ
6–9	Session Number

Executable Code records

Executable code from the System Control Repository is copied to the Employee Database for each program executed online or in batch. This allows for faster processing.

Key Structure	
Column(s)	**Value**
1–3	Binary record length
4–6	ZX
7–12	Program Name
13	Sequence number (tie breaker)

Session records

The first record is the Session Index Record. This record is used to assign new session numbers when a user signs on to the system. There are other session records, one to a session, displaying the last form executed in the session. When the area directly after the Operator ID is blank it indicates the session was used for a batch job.

Key Structure	
Column(s)	**Value**
1–3	Binary record length
4–5	ZY
6–9	Session Number
10–13	Operator ID

Audit records

Audit records are form 'snap shots' of information entered in online sessions.

Key Structure	
Column(s)	**Value**
1–3	Binary record length
4–5	Code ZI or ZZ
6–9	Session Number
10–13	Audit Record Number (within the session)

Code	Description
ZZA	Active timecards or adjustments

Code	Description
ZZB	Cancelled timecards or adjustments

Time Entry/Adjustment Transaction records

Time Entry and Adjustment Transaction ('ZZA' records) are written to the Employee Database whenever a time card or adjustment form is entered. These records used in the pay cycle, and are written to FILE10 by PAYXTR.

Key Structure	
Column(s)	**Value**
1–3	Binary record length
4–6	ZZA
7–12	Organization Control Number
13–16	Session Number
17–20	Audit Record Number (within session)

APPENDIX F

System Files

In This Appendix

Online System Files

File Name Assignment	Organization	Media	Input/Output	Record Size	Purpose
FILE01	Random	Disk	Input/Output	80	Control File
FILE02	Random	Disk	Input/Output	Variable (3060 max)	Master File
FILE03	Sequential	Printer	Output	132	Audit/Report/Message Print File (Form Code 1)
FILE04	Sequential	Reader	Input	80	Control Records File
FILE05	Sequential	Disk	Input	80	Data Input File
FILE06	Random	Disk	Output	80	Installation Control File
FILE07	Random	Disk	Output	Variable (3060 max)	Installation Master File
FILE08	Random	Disk	Input/Output	Variable (727 max)	Replication Holding File
FILE09	Random	Disk	Output	Variable (727 max)	Installation Replication Holding File
FILE10	Sequential	Disk/Tape	Output	80	Data Output File
FILE11	Sequential	Disk/Tape	Input	256	Payroll Process Batch Master File
FILE12	Sequential	Disk/Tape	Output	256	Payroll Process Batch Master File
FILE13	Sequential	Disk/Tape	Input	256	Payroll Process Batch Master File
FILE14	Sequential	Disk	Input	150	Report Extract Input File
FILE15	Sequential	Disk	Output	150	Report Extract Output File
FILE17	Sequential	Printer	Output	132	Alternate Print File (Form Code 2)
FILE18	Sequential	Printer	Output	132	Alternate Print File (Form Code 3)
FILE19	Sequential	Printer	Output	132	Alternate Print File (Form Code 4)

File Name Assignment	Organization	Media	Input/Output	Record Size	Purpose
FILE20	Sequential	Disk	Input/Output	Variable (636 max)	Replication Packet File—target
FILE21	Sequential	Disk	Input/Output	Variable (846 max)	Replication Packet File—source
FILE23	Random	Disk	Input/Output	Variable (3060 max)	User Defined File
FILE24	Sequential	Disk	Input	Variable (3060 max)	User Defined File
FILE25	Sequential	Disk	Output	Variable (3060 max)	User Defined File
FILE30	Sequential	Disk	Output	320	Savings Bond File
FILE31	Sequential	Disk	Output	132	Check Print

APPENDIX G

Payroll Process Files

In This Appendix

Payroll Process Files

File Name Assignment	Organization	Media	Input/Output	Record Size	Purpose
P05RDR	Sequential	Disk/Tape	Input	80	Reader File
P05IN	Sequential	Disk/Tape	Input	118	Recycle File/Valid Transactions
P05OUT	Sequential	Disk/Tape	Output	118	Recycle File/Valid Transactions
P05T80	Sequential	Disk/Tape	Input/Output	80	Transactions File
P05T81	Sequential	Disk/Tape	Input	80	Transactions File
H20IN	Sequential	Disk/Tape	Input	256	Optional Batch Master File
P20IN	Sequential	Disk/Tape	Input	256	Batch Master File
P20OUT	Sequential	Disk/Tape	Output	256	Batch Master File
P40IN/ P40IN1	Sequential	Disk/Tape	Input	150	Report Extract File
P40OUT/ P40OUT1	Sequential	Disk/Tape	Output	150	Report Extract File
PRINTn	Sequential	Printer/Disk	Output	132	Report Output File (PRINT1, PRINT2, PRINT3, PRINT4, PRINTU, PRINTV, and so forth)
CYBMST	Sequential	Disk/Tape	Input	80	Cyborg Master Library
FILE1	Sequential	Disk/Tape	Output	80	Member Extract File
FILE24	Sequential	Disk/Tape	Output	80	Updated Cyborg Master Library

APPENDIX H

Naming Conventions

In This Appendix

About this section

This section contains naming conventions for the following areas:

- Field names
- Program names
- Cyborg Scripting Language (English Language) verb names
- Module codes
- Table codes
- Alternate Keys
- Option list names
- Employee segment codes
- Company segment codes
- 'Other' records
- Error message numbers
- File numbers
- Country codes

Field names

The following tables identify Cyborg's naming standards:

Group	Specific Information
General Requirements	1–18 characters, 0–9, A–X, and - First character must be A–Z. Characters 19 and 20 must not be used for DB2 compatibility.
Product Release Standards	First character must not be 'X'. Final three characters must not be '-Xx' where 'x' is any other character. Must be assigned by the Naming Administrator.
Consulting Standards	First character must not be 'X'. Final three characters must be '_Xx' where 'x' is any other character.
Customer Standards	First character must be 'X'.

Program naming convention

Group	Specific Information
General Requirements	1–6 characters, 0–9, A–Z, and . ^ ~ @ ! - First character may not be @ or - Fifth and sixth characters must be 'PT' for report extract Fifth and sixth characters must not be 'PT' if not a report extract Fifth and sixth characters must be a 'P' and a space for report output Fifth and sixth characters must not be a 'P' and a space if not report output
Product Release Standards	First character must not be 'X' ~ must not be used @ must only be used to denote country subroutine (for example, '@US' for United States, '@CA' for Canada, '@AS' for Asia, '@AU' for Australia, '@UK' for United Kingdom, '@SA' for South America and Caribbean) Must be assigned by the Naming Administrator
Consulting Standards	First character must not be 'X' ~ must be used within name No other special character may be used
Customer Standards	First character must be 'X' No other special characters may be used

Cyborg Scripting Language (English Language) verb names

Group	Specific Information
General Requirements	1–20 characters, A–Z, 0–9, and -
Product Release Standards	First character must not be 'X' Final three characters must not be ' -Xx' where 'x' is any other character Must be assigned by the Naming Administrator
Consulting Standards	First character must not be 'X' Final three characters must be ' -Xx' where 'x' is any other character
Customer Standards	First character must be 'X'

Module codes

Group	Specific Information
General Requirements	Two characters First character must be alphabetic
Product Release Standards	First character must not be 'X' Second character must be alphabetic Must be assigned by the Naming Administrator
Consulting Standards	First character must not be 'X' Second character must be numeric
Customer Standards	First character must be 'X'

Table codes

Group	Specific Information
General Requirements	2–4 characters, except = and _ First character must be 'P', then 'R' or 'T–X'
Product Release Standards	First characters must be 'PR' (position control), 'T', 'U', or 'V' Must be assigned by the Naming Administrator
Consulting Standards	First character must be 'W'
Customer Standards	First character must be 'X'

Alternate Keys

Group	Specific Information
General Requirements	2 characters, 0–9, A–Z
Product Release Standards	Two numerical or two alphabetical characters Must be assigned by the Naming Administrator
Consulting Standards	Alphabetic followed by numeric
Customer Standards	Numeric followed by alphabetic

Option list names

Group	Specific Information
General Requirements	4 or 5 characters First two characters must be a module code Fifth character may be a space, '9', or 'Y'
Product Release Standards	Fourth character must be numeric Must be assigned by the Naming Administrator
Consulting Standards	Fourth character must be A–L
Customer Standards	Fourth character must be M–Z

Employee segment codes

Group	Specific Information
General Requirements	2 characters, 0–9, A–Z L segment-type; pointer 36
Product Release Standards	First character may not be A–N Must be assigned by the Naming Administrator
Consulting Standards	First character must be A–K
Customer Standards	First character must be 'L', 'M', or 'N'

Company segment codes

Group	Specific Information
General Requirements	2 characters, 0–9, A–Z C segment-type; pointer 23
Product Release Standards	First character must not be 'B' or M–Z Must be assigned by the Naming Administrator
Consulting Standards	First character must be M–Z
Customer Standards	First character must be 'B'

Other records

Group	Specific Information
General Requirements	Data type of 'F', 'G', or 'W' 2 character table code, 'FD', 'GD', 'WB', or 'ZZ' 2 character key prefix 0–9, A–Z
Product Release Standards	Data type must be 'F' or 'W' 2 character table code must be 'FD', 'WB', or 'ZZ' 2 character key prefix must not begin with 'C' Must be assigned by the Naming Administrator
Consulting Standards	Data type must be 'F' or 'W' 2 character table code must be 'FD', 'WB', or 'ZZ' First character of key must be 'C'
Customer Standards	Data type must be 'G' or 'X' 2 character table code must be 'GD' 2 character key prefix as desired

Error message numbers

Group	Specific Information
General Requirements	3 characters First character must be 0–9, A–Z Second and third characters must be numeric
Product Release Standards	First character must be numeric Must be assigned by the Naming Administrator
Consulting Standards	First character must be A–L
Customer Standards	First character must be M–Z

File numbers

Group	Specific Information
General Requirements	2 digits
Product Release Standards	Must be 01–22, 30–49 Must be assigned by the Naming Administrator
Consulting Standards	Must be 50–99
Customer Standards	Must be 23–29

Country codes

Group	Specific Information
General Requirements	1 character 0–9, A–Z
Product Release Standards	Must be 0–9, A–T Must be assigned by the Naming Administrator
Consulting Standards	Must be U–W
Customer Standards	Must be X–Z

APPENDIX I

Report Quick Reference

In This Appendix

Introduction

This section provides a quick reference guide to the reports covered in this documentation.

Batch Layout (BATCHL)

The Batch Layout report is used as the basis for writing a conversion program to load static data into The Solution Series. It lists the entry fields found on each form in the system. It provides form-image records, field lengths, and any comments associated with each entry field for each select form. You can request reports for one or several forms.

Fields

Information reported includes:

Report Field Name and Description

- **From**—The start position of the field.
- **To**—The end position of the field.
- **Field Name**—The name of the field in the Field Name Table.
- **Length**—The number of positions the field occupies.
- **Format/Edit**—Field type.

☞ *For more information on this program, refer to* **Data Conversion and Load** *(on page 163).*

See also:

- Generating a Batch Layout Report ***(on page 182)***

To learn how to request a Batch Layout report for a given form.

- Loading static data using BATCHL transactions ***(on page 183)***

To learn how to directly update the Employee Database with Batch Layout transaction records.

- ***Loading cumulative data using batch Payroll transactions***

To learn how to merge cumulative data into the Employee Database through a pay merge.

Batch Layout (BATCHL) Example

```
Batch Layout Report for Pending Plan Enrollment/De-Enrollment

Change mode regular display 90-SCR layout for United States

From   To         Field Name         Length        Comments        Format/Edit
================================================================================

  1     8     Program Literal          008         P CONTRL        Constant
  9    14     Task Number              006         T00010          Constant
 15    15     Filler                   001         Space           Constant
 16    16     Comm-Cancel              001         Space           Constant
 17    22     Company Number           006         999999          Alphanumeric
 23    28     Program Field            006         90-SCR          Constant
 29    29     Code-1                   001         Space           Constant
 30    30     Code-2                   001         Space           Constant
 31    40     Key Field                010                         Alphanumeric
 41    55     Additional Key           015                         Alphanumeric
 56    58     PLAN-ID-RA               003                         Alphanumeric
 59    68     SUSPENSE-DATE            010
 69    69     SCREEN-CODE2-OPTS        001                         PP66
 70    74     CALC-ACTION-DATE         010         Pos 001-005
 75    75     Continuation-Ind         001         *               Constant

  1     8     Program Literal          008         P CONTRL        Constant
  9    14     Task Number              006         T00020          Constant
 15    15     Filler                   001         Space           Constant
 16    20     CALC-ACTION-DATE         010         Pos 006-010
 21    21     CALC-ACTION-CODE         001                         BA44
 22    31     SPECIAL-DATE             010
 32    32     SCREEN-OPTION-1          001                         Alphanumeric
 33    33     SCREEN-OPTION-2          001                         Alphanumeric
--------------------------------------------------------------------------------
 CSSS <0026( (999999(BATCHL(  (90-SCR    (CR             )11:08:46 08-23 XXXX
```

FILE02 Records (RECSIZ)

The FILE02 Records report displays the keys, sizes, and types of records on the Employee Database (Master File; FILE02). These figures are used as input to the Employee Area and Company Area Expansion worksheets. These worksheets are used to determine whether or not the Employee and Company working-storage areas need to be expanded.

By default, the report shows the largest company and largest employee records on file. If you enter the value DETAIL in the KEY field on the control record, the report displays the key, size, and type of every record that resides on the Employee Database (Master File; FILE02).

Fields

Information reported includes:

Report Field Name

- **Largest Employee Record**—Size of the largest employee record
- **Maximum Employee Record**—Maximum allowable size for an employee record
- **Largest Company Record**—Size of the largest company record
- **Maximum Company Record**—Maximum allowable size for a company record

☞ *For more information on this utility, refer to* **Managing Working Storage** *(on page 311).*

See also:

- Determining if expansion is required for employee and company areas ***(on page 325)***

To learn how to identify the largest employee and company records on the database.

FILE02 Records (RECSIZ) Example

```
FILE02 RECORDS REPORT



LARGEST EMPLOYEE RECORD: 999999  1975        5,030
MAXIMUM EMPLOYEE RECORD:                    24,958

LARGEST COMPANY RECORD:  999999              6,161
MAXIMUM COMPANY RECORD:                     32,192
```

L Segment Delete Report (LD-RPT)

The L Segment Delete Report processes the parameters previously entered on the L Segment Delete Set-Up form and, based on the parameter entered on the parameter form, will either delete the indicated L segment (Human Resources/Personnel) records or provide a preview listing of what will be deleted.

Execute this report using the standard REPORT program sort (1,60,A), and RTPRNT process. The file03 output from the RTPRNT process will contain your report, if requested.

Before executing the LD-RPT, be sure to make a backup of your current Employee Database. Once the L segments are deleted, they cannot be recovered unless you restore to the Employee Database used prior to the report run.

You must execute this report on the same calendar day that you specify L segments to be deleted on the L Segment Delete Set-Up form.

Fields

Information reported includes:

Report Field Name

- **Segment Code**—The segment that is (or will be) deleted.
- **# of Occurrences**—The number of occurrences that were (or will be) deleted.
- **Retention Date**—Segment occurrences before this date were(or will be) deleted.

Parameters

- **Preview**—You will be able to preview the effect of the deletion before the actual deletion takes place (so you may decide to keep the L segment in tact).
- **Delete**—The deletion will occur and the resulting report will list the segments you deleted.
- **Delete NoList**—The deletion will occur and the report will not provide a record of the deletion.

L Segment Delete Report (LD-RPT) - Example

```
CORPORATION  99    ACME MANUFACTURING     L-SEGMENT DELETION REPORT     REPT    FILE VERSION 00  PAGE     1
DIVISION     9999  PRODUCTION CTL 1-2           PREVIEW RUN             LD-R    TIME 13:55       DATE 05-19-1998


 -*-*- RECOMMEND FILE BACKUP PRIOR TO DELETION OF L-SEGMENTS -*-*-


DELETE CRITERIA:       SEGMENT CODE       **
                       # OF OCCURENCES    00
                       RETENTION DATE     01-01-1998
```

APPENDIX J

Program and Utility Quick Reference

In This Appendix

Introduction - Program and Utility Quick Reference

This section provides a quick reference guide to the utilities and programs covered in this manual.

Apply overrides to master COBOL source---PULLUP

This utility is used to apply COBOL override code to the master COBOL source when executing an Extract System Programs (PULL) operation. The program is used in place of PULL when the overrides are to become permanent records in the COBOL source.

Note: *THIS PROGRAM IS FOR CYBORG USE ONLY. Clients using this program must exercise EXTREME CAUTION. Cyborg cannot support COBOL programs that have been permanently changed with user overrides.*

Backup System Control Repository---BACKEM

This utility makes a sequential copy of the System Control Repository.

☞ *For more information on this utility, refer to* **Using the Backup and Restore Utilities** *(on page 259).*

See also:

- ***Running the Backem utility***

To learn how to backup the System Control Repository

Batch Layout Facility---BATCHL

The Batch Layout Facility (BATCHL) produces the Batch Layout Report, which lists the entry fields found on each form in the system. The Batch Layout Report provides screen-image records, field lengths, and any comments associated with each entry field for each selected form. You can request reports for one or several forms.

☞ *For more information on this program, refer to* **Data Conversion and Load** *(on page 163).*

See also:

- Generating a Batch Layout Report ***(on page 182)***
  To learn how to request a Batch layout report for a given form
- Loading static data using BATCHL transactions ***(on page 183)***
  To learn how to directly update the Employee Database with Batch Layout transaction records
- ***Loading cumulative data using BATCHL Payroll transactions***
  To learn how to merge cumulative data into the Employee Database through a pay merge

Build Phonetic and/or Employee ID Keys---KEY-PE

This utility is used to build phonetic and Employee ID Alternate Keys by Organization. This program can be run in batch or online using Query.

☞ *For additional information, refer to* **Maintaining Cross-Reference Keys** *(on page 229).*

See also:

- Maintaining Phonetic and Employee ID Keys ***(on page 239)***

To learn how to rebuild phonetic and/or employee ID keys

Build relational database structures---RDBPGM0

The CASE tool program used to build the relational database structures and data manipulation language (DDL) statements.

☞ *For a detailed description of the CASE tool, refer to* **Data Structures and Processing Mode** *(see "Data Structures and Processing Modes" on page 45)s.*

Note: This program is only applicable if you are using the relational version of the system.

Build the Client Data File---CSSSBLD

This program builds the Client Data File using the output file (FILE10) from the Export Client File program.

☞ *For more information on this program, refer to* **Maintaining the Client Data File** *(on page 247).*

See also:

- Rebuilding the Client Data File ***(see "Rebuilding the Client Data File---Online Method" on page 254)***

To learn how to rebuild the Client Data File on the client computer

CBSVB (CBSVB)

This is the batch program used to produce reports and to access or maintain The Solution Series files off-line.

☞ *For more information on this program, refer to* **Setting Up Environments** *(on page 75).*

CBSVBT---CBSVBT

This is the trace version of the CBSVB batch program. The program includes diagnostics for debugging purposes.

☞ *For more information on this program, refer to* **Setting Up Environments** *(on page 75).*

CBSVO---CBSVO

This online program allows real-time, interactive reading and updating of the two main Solution Series files; the System Control Repository and the Employee Database.

☞ *For more information on this program, refer to* **Setting Up Environments** *(on page 75).*

CBSVOT---CBSVOT

This is the trace version of the CBSVO online program. The program includes diagnostics for debugging purposes.

☞ *For more information on this program, refer to* **Setting Up Environments** *(on page 75).*

Change Control Facility---Maintenance Input (MAINTI)

This utility applies maintenance transactions to the System Control Repository. The maintenance transactions can be from an EXPORT or from a Maintenance Output (MAINTO).

See also:

- Applying a Cyborg Scripting Language temporary fix ***(on page 222)***
  To learn how to use the Change Control Facility to apply a fix to CSL code
- Applying a FormBuilder fix ***(on page 223)***
  To learn how to use the Change Control Facility to apply a fix to forms

Change Control Facility---Maintenance Output (MAINTO)

This utility compares a Sequential Input File (FILE05) to the random System Control Repository (FILE01) to produce a list of records that have been added, changed, or deleted.

Output is written to the output file (FILE10). Modified records can be used for re-applying to the System Control Repository using the Maintenance Input (MAINTI) utility. The Maintenance Output (MAINTO) utility is used to gather and re-apply user modifications when a new version or update of the system is released.

See also:

- ***Creating a Difference File (MAINTO)***
  To learn how to use the Maintenance Out utility

- Utilities for customization ***(on page 115)***
  To learn how to create a differences file

- Backup considerations for change control ***(on page 261)***
  To learn the role MAINTO plays in tracking change control

Copy international option lists---ICCOPY

This utility copies selected or all option list records for a particular country from the System Control Repository. As part of this copying process, the option list records are copied with a replacement country code.

The copied records are written to the output file (FILE10), which can be viewed or edited using an appropriate file maintenance utility. The records are then loaded into the system using the Maintenance Input (MAINTI) utility.

You can run this utility only in batch, except for the users of the PC version of The Solution Series, who can run it in batch or execute it online.

Copy variant form table records for a country---(VSCOPY

This utility copies selected or all variant form table records for a particular country from the System Control Repository. As part of this copying process, the country code held on the table records is replaced with the specified country code. The copied records are written to the output file (FILE10).

This utility may be useful if you are establishing a new country on your System Control Repository.

This utility can be used to copy the specified country's variant form table record for a selected form program or for all programs for which these table records exist for the country.

Correct invalid data on a P20 file---RDBPGM4

This program is used for correcting invalid data (date and decimal) on a P20 file. It is used for upgrading from versions prior to 2.0 of The Solution Series.

Note: This program is only applicable if you are using the relational version of the system.

☞ *For additional information on this utility, refer to* **Setting Up Environments** *(on page 75).*

See also:

- Correcting invalid data ***(on page 92)***

To learn how to correct invalid data on a P20 file

Create control records and extract payroll data for Sybase---RDBPGMX

The program used in the NEWXTR job stream to create control records for the Sybase Bulk Copy Process (BCP) and extract data from the Employee Database (Master File; FILE02) for payroll processing.

☞ *For more information on this program, refer to* **Performance Tuning for Relational Databases** *(on page 351).*

Note: This program is only applicable if you are using the relational version of the system.

Create control records and update Sybase Employee Database---RDBPGMM

The program used in the NEWMRG job stream to create control records for the Sybase Bulk Copy Process (BCP) to update the Employee Database (Master File; FILE02) after payroll processing.

☞ *For more information on this program, refer to* **Performance Tuning for Relational Databases** *(on page 351).*

Note: This program is only applicable if you are using the relational version of the system.

Create LDEFAULTS D Records---SETUPS

The Create LDEFAULTS D Records utility builds LDEFAULTS model information as System Control Repository D records. These D records provide default values for certain L segment (Human Resources/Personnel) form fields whenever the form field is left blank. This operation saves time and unnecessary keystrokes for entering data into fields that usually is the same for all employees (for example, Country Code). If a user does not want to accept the defaults, he or she need only make an entry in the field. A user entry takes precedence over the default entry.

The Create LDEFAULTS D Records utility must be executed each time new LDEFAULTS model forms are established, modified, or deleted. If the Create LDEFAULTS D Records utility is not run when appropriate, it could result in an inactive LDEFAULTS or invalid default data.

Create new Employee Database---FILE07

FILE07 is a batch-only program that enables you to create an Employee Database (Master File; FILE02) from scratch without using P4CALC, the batch payroll processing program.

The program opens a FILE07, copies object code from the Control File (FILE01) to it, and then closes the file.

Sites that do not run Cyborg's Payroll Administration component can use FILE07 to create a first-time Employee Database (Master File). Rename the FILE07 output file FILE02. Then access the Add a New Company form to add Organizations to the Employee Database.

Create tables, indexes, and views---RDBPGM1

This program, generated by the CASE tool (RDBPGM0) contains the data definition language (DDL) statements to create tables, indexes, and views.

Note: *This program is only applicable if you are using the relational version of the system.*

☞ *For more information on this program, refer to the relational section of the installation guide for your Solution Series version.*

CYB88x---CYB88

CYB88x is an English Language program that performs the following tasks:

- Manages session number information.
- Restores portions of working storage.
- Assigns the default Organization (Company; Control 1-2) displayed.
- Sets the maximum number of lines on a report page.
- Sets the Production Version switch to on or off.

CYB89x---CYB89

CYB89x is an English Language program that loads pointer definitions into working storage.

When you sign on to the system, CYB89x attempts to locate the pointer table on the Employee Database (Master File; FILE02).

If the pointer table is not found, CYB89x copies them from the System Control Repository (Control File; FILE01) into a single table on the Employee Database (Master File; FILE02).

Processing is then more efficient because less I/O is required to read one table

CYB90x---CYB90

The English Language program CYB90x acts as the operating system for the computer. CYB90x reads the Command Line (or control record) and turns control over to the requested English Language application or utility program. When the English Language program is finished, control is passed back to the CYB90x program.

Delete Phonetic and Employee ID Alternate Keys---DEL-PE

The DEL-PE program is used to delete all phonetic and employee ID alternate Keys used by the PHONET and LOOKUP programs. DEL-PE may be executed online or in batch mode.

☞ *For additional information, refer to* **Maintaining Cross-Reference Keys** *(on page 229).*

See also:

- Maintaining Phonetic and Employee ID Keys ***(on page 239)***

To learn how to delete phonetic and/or employee ID keys

Delete selected records---PURGE

This utility deletes selected records, of a specified object type, from the System Control Repository (Control File; FILE01). The system verifies deletion of a record before the actual purge is performed, allowing you to cancel the purge.

See also:

- Using the record delete (PURGE) utility ***(on page 137)***

To learn how to purge a System Control Repository object

Delete the AREA size record---DEL-ZX

This program deletes the ZXCYB88W record for the PC-LAN version of The Solution Series or the ZXCYB88M record for all non-PC platforms.

A new record, ZXCYB88W or ZXCYB88M as appropriate, will be created on the Employee Database the next time the COBOL programs are executed.

☞ *For more information on this utility, refer to* **Managing Working Storage** *(on page 311).*

See also:

- Expanding employee (Area2) and/or company (Area4) work areas ***(on page 326)***

To learn how to delete the AREA size record

Display Employee Database records---DSP02

This utility is used to view the first 76 positions of records in the Employee Database. The system displays the records based on a part KEY field entry. To view all records, you can specify START as your KEY field entry. Several CODE-2 field options are provided that enable you to display the second E segment.

☞ *For more information on this utility, refer to* **Managing Working Storage** *(on page 311).*

Display Employee Database Record Keys---RECSIZ

This is a batch report program that displays the keys, sizes, and types of records on the Employee Database.

By default, the RECSIZ report shows the largest company and largest employee records on file. If you enter the value DETAIL in the KEY field on the control record, the report displays the key, size, and type of every record that resides on the Employee Database.

☞ *For more information on this utility, refer to* **Managing Working Storage** *(on page 311).*

See also:

- Determining if expansion is required for employee and company areas ***(on page 325)***

To learn how to identify the largest employee and company records on the database

Display System Control Repository Records---DSP01

DSP01 is a listing program that lets you view records in the System Control Repository (Control File; FILE01).

You can view all System Control Repository records except security records (object Y) and object code records (object P/X). However, this program does provide a count of the total number of object code records on the System Control Repository.

The system displays System Control Repository records based on a partial KEY field entry. To view all records (except security and object code records), you can specify START as your KEY field entry.

See also:

- Displaying System Control Repository records (DSP01 ***(see "Displaying System Control Repository records" on page 68))***

To learn how to display records in the System Control Repository

- Using the List Control file Records (DSP01) utility ***(on page 136)***

To list any of the records on FILE01 except security and object code records

Execute a DOS command from a file---DOSPRE

The DOSPRE program is used by the PC Solution module only. DOSPRE allows you to execute a DOS command from a file of predefined DOS commands.

The DOS commands must reside in a T-type P-EDIT file. The file name is then indicated in the Key field of the DOSPRE Control Record.

When executed, the DOSPRE command turns control over to DOS and displays the predefined DOS command file. The desired DOS command is then chosen from the list in the file.

Execute control records on the System Control Repository---F04F01

This program enables you to process FILE04 control records instead of System Control Repository records. This means that you can use control records to update the Employee Database.

While F04F01 executes both online and in batch, run it in batch mode to specify several control records.

☞ *For more information on this utility, refer to* **Running Report Options** *(on page 275).*

See also:

- Setting up the job streams for SUBMIT and VIEW ***(on page 295)***

To learn how to use control records to update the Employee Database

Expand Areas in CBSV Programs---EXPAND

The Expand Areas in CBSV Programs form enables you to increase the size of working storage. When you access this form, you can specify new sizes for Areas 2 through 4 of working storage.

☞ *For more information on this utility, refer to* **Managing Working Storage** *(on page 311).*

See also:

- Expanding 'Payroll-only' areas ***(on page 333)***

To learn how to used the EXPAND transaction for Payroll-only areas

- Expanding employee (Area20 and/or company (Area4) work areas ***(see "Expanding employee (Area2) and/or company (Area4) work areas" on page 326)***

To learn how to expand employee and company work areas

Export Client Data File Items---MAKECL

This program extracts option list values, field definitions, form security, and PC menu records from the System Control Repository and writes them to the sequential FILE10. FILE10 is then used by CSSSBLD, to construct the Client Data File (FILECL32).

If the System Control Repository resides on a machine other than a PC, the output of MAKECL must be downloaded to the client PC. Additionally, it must be sorted on the first 24 positions, after it is downloaded, if the host or server machine uses the EBCIDIC character set, for example, IBM mainframe, IBM AS/400.

☞ *For more information on this program, refer to* **Maintaining the Client Data File** *(on page 247).*

See also:

- Rebuilding the Client Data File ***(see "Rebuilding the Client Data File---Online Method" on page 254)***

To learn how to use the MAKECL program to rebuild a Client Data File

Extract COBOL programs---PULL

This utility is a batch-only program that extracts the system program specified in a FILE04 control record from the sequential FILE05. PULL is executed by jobstream JPULL. Current users who are upgrading to a new release, changing the size of working storage, or performing maintenance can use PULL to extract these programs.

☞ *For additional information on this utility, refer to* **Identifying Problems and Applying Temporary Fixe** *(see "Identifying Problems and Applying Temporary Fixes" on page 205)s and* **Managing Working Storage** *(on page 311).*

See also:

- Applying a COBOL temporary fix to CBSVx ***(on page 221)***

To learn how to extract COBOL source code

- Expanding employee (Area2) and/or company (Area4) work areas ***(on page 326)***

To learn how to extract the COBOL programs to include the new AREA2-BOTH and AREA4-BOTH values

Extract System Control Repository Records---EXPORT

The Extract System Control Repository Records utility extracts all or selected records, of a specified object (record) type, from the System Control Repository. It writes these records to the output file (FILE10), which you may then view, manipulate, or print using your system utilities.

This utility is similar to the View a Specified Type of System Control Repository Record utility (DISPLY). Whereas this utility is a batch program that produces an output file of the selected records; the View a Specified Type of System Control Repository Record utility shows selected records online.

☞ *For more information on this utility, refer to* **Customization** *(on page 107) and* **Performance Tuning for Relational Databases** *(on page 351).*

See also:

- Rebuilding the relational database (Relational only ***(see "Rebuilding the relational database (Relational only)" on page 148))***

To learn how to extract the first line of the F records and the RFM records

- Converting dynamic SQL to static SQL ***(on page 358)***

To learn how to extract records from the Field Name Table

Get Screen Appearance Table---GETSAT

A Solution Series program that copies the internal Screen Appearance Table for a specific screen to an SAT file that can be edited using ScreenMaker. The Screen Appearance Table is obtained from the English Language program code (object P/S) in the Control File (FILE01).

☞ *For additional information on GETSAT, refer to* **Customization** *(on page 107).*

Identify table synchronization problems---RDBPGM2

This program is used to determine what synchronization problems exist between the database tables and the Employee Database.

Note: This program is only applicable if you are using the relational version of the system.

☞ *For additional information on this utility, refer to* **Setting Up Environments** *(on page 75).*

See also:

- Determining what synchronization errors exist ***(on page 92)***

To learn how to identify synchronization problems

List programs in memory---INCORE

This utility lists the entries in the Program Table (Pointer 17). The Program Table contains information about the programs that currently reside in memory (up to 31 at one time), such as their names, length, and position. The entries in the Program Table change as new programs are accessed, replacing those programs in memory.

Note: *When a user modifies a program and executes RELOAD to compile it, only that user immediately receives the new version in memory. Other users who have the old version of the program in memory do not receive the new version automatically. The system must first replace the old version of the program with the new version.*

Process batch jobs that require security authorization--- BATRUN

This program is used to process batch jobs that require security authorization.

The authorization is established by your supervisor or Security Officer using the Setting up a Batch Security Record (P-WORD) form. The BATRUN program searches the security file for a batch security record that matches your Operator-ID and the batch password that was entered on the P-WORD form.

Security is checked and then the actual file of Control Records is executed. Once security is passed, the batch password and security authorization are overlaid with a run date and time.

To re-run the job, a new Password must be set-up using P-WORD.

Purge object code from the Employee Database--- PRG02X

This utility deletes specified executables from the Employee Database. This utility is useful when you are applying custom changes to the system.

See also:

- Synchronizing the executables ***(on page 270)***

To learn how to synchronize the executables on the system Control Repository and the Employee Database

Purge Organizations from the Employee Database--- PRGC12

This utility allows you to purge company and employee test data from the Employee Database.

HR-only clients can not use P2EDIT/P4CALC to perform this task.

PRGC12 allows this task to be performed online.

PRGC12 tests to ensure that the organization value is '99' before deleting records from the Employee Database. Currently, all test organization values are '99'.

Put Screen Appearance Table---PUTSAT

A method of displaying data that can include graphics (such as boxes, buttons, and rectangles) as well as text on the computer screen.

☞ *For additional information, refer to* **Customization** *(on page 107).*

QUERY Alternate Key Build---KEY-00

This utility builds (and rebuilds) Alternate Key records that supply data for your Query programs. It is important to keep your Alternate Key records current. Cyborg suggests that you set up a schedule (biweekly or monthly) for rebuilding these records. As delivered, KEY-00 creates Alternate Key records by organization for each Master Record on file.

☞ *For additional information, refer to* **Maintaining Cross-Reference Keys** *(on page 229).*

See also:

- Maintaining QUERY Alternate Keys ***(on page 237)***

To learn how to rebuild Alternate Keys

QUERY Alternate Key Delete---KEYDEL

This utility deletes Alternate Key records from the System Control Repository by Alternate Key type and organization. Once the records are deleted, new Alternate Key records can be (re)built using KEY-00 (or a renamed KEY-00 program).

☞ *For additional information, refer to* **Maintaining Cross-Reference Keys** *(on page 229).*

See also:

- Maintaining Query Alternate Keys ***(on page 237)***

To learn how to delete Alternate Keys

Rebuild a particular index record on the Employee Database---FIXIDX

This program rebuilds a particular index record on the Employee Database for a relational table.

Note: This program is only applicable if you are using the relational version of the system.

☞ *For more information on this program, refer to* **Synchronizing Relational Tables and Indexes** *(on page 337).*

See also:

- Rebuilding individual Employee Database index records online ***(on page 348)***

To learn how to run the INDEXS utility online

Rebuild all index records on the Employee Database---INDEXS

This program rebuilds all index records on the Employee Database for relational tables.

Note: This program is only applicable if you are using the relational version of the system.

☞ *For more information on this program, refer to* **Synchronizing Relational Tables and Indexes** *(on page 337).*

See also:

- ***Rebuilding all Employee Database index records***

To learn how to run the INDEXS utility online

Remove ZX (executable code) records from the Employee Database (ZX-DEL)

This program is used to remove all ZX (executable code) records from the Employee Database so that the system is forced to pull a new copy from the System Control Repository.

See also:

- Executing PRG02X or ZX-DEL in batch ***(on page 271)***

To learn how to delete all executable code (ZX) records from the Employee Database

Report Extract---REPORT

This program creates report extract records by executing each of the report programs included in a specified Report Group Schedule. To run this program, you execute CBSVB or CBSVBT with a control record as FILE04.

☞ *For more information on this program, refer to* **Running Report Options** *(on page 275).*

See also:

- Initiating a report run in batch ***(on page 294)***
  To learn how to create extract records
- Consolidated reporting ***(on page 288)***
  To learn how to create extract records for a consolidated report
- Roll-up reporting ***(on page 289)***
  To learn how to create extract records for a roll-up report

Report on table space size---RDBPGM3

This program produces a report of table space sizes. It can help estimate table space sizing based on the data in the P20 batch file. It sums the number of bytes for each table and the associated index, reporting the sums by record type and table space. The number of bytes does not include any overhead requirements for any specific database.

Note: This program is only applicable if you are using the relational version of the system.

☞ *For additional information on this utility, refer to* **Setting Up Environments** *(on page 75).*

See also:

- Initiating a report run in batch ***(on page 294)***

To learn how to run the RTPRNT program

Report Print---RTPRNT

This program reads the sorted extract records (FILE14), reformats and writes them to either FILE03 or one of the alternate print files (FILE17, 18, or 19). To run this program, you execute CBSVB or CBSVBT with a control record as FILE04.

☞ *For more information on this program, refer to* **Running Report Options** *(on page 275).*

Sort Extract Records---SORT

This program prepares the extracted report records for the final Report Print (RTPRNT) step. The SORT:

- sorts each record based on the sort key.
- writes the sorted report extract records to FILE14. This file will be read into the Report Print (RTPRNT) step.

☞ *For more information on this program, refer to* **Running Report Options** *(on page 275).*

See also:

- Initiating a report run in batch ***(on page 294)***

To learn how to run the SORT program

Restore System Control Repository---DEMO01

This utility creates a random System Control Repository from a sequential backup file delivered with the system.

☞ *For more information on this utility, refer to* **Using the Backup and Restore Utilities** *(on page 259).*

See also:

- Running the Restore System Control Repository utility ***(on page 269)***

To learn how to restore the System Control Repository from a sequential backup

Resynchronize the System Control Repository and relational tables (POPF01)

This program resynchronizes the System Control Repository and its associated relational tables.

Note: This program is only applicable if you are using the relational version of the system.

☞ *For more information on this program, refer to* **Synchronizing Relational Tables and Indexes** *(on page 337).*

See also:

■ Synchronizing the System Control Repository and the relational tables ***(on page 345)***
To learn how to run the POPF01 utility

Returning Control to FILE01---F01F04

This program passes control from F04F01 online processing to normal online processing. For example, if you want users to be able to execute test data in a tutorial or other online documentation, you specify control records that execute F04F01.

However, you must return the user to the text after the control records are processed. Therefore, end any F04F01 online processing with a control record that executes F01F04. Note, however, that an F01F04 control record is not required in batch processing.

Submit batch jobs---SUBMIT

This program enables you to submit batch jobs. It tells the system to run a query or a report. You can direct the output records to a print file or to the Employee Database for online viewing.

If you direct the output records to the Employee Database, the ROUTER batch subroutine is automatically invoked.

The online records, ZR records, are temporary, and are deleted when the Employee Database is rebuilt. To avoid space problems, you should limit SUBMIT processing to low-volume reports and queries.

For more information on this program, refer to **Running Report Options** *(on page 275).*

Suspend record lock handling---NOLOCK

The NOLOCK program allows you to suspend normal lock record (ZL) processing while using BATCHL-format transactions to update a large number of records via a batch execution of CBSVB.

Each time the CBSVB program is initiated, lock records are processed during FILE02 record updates. The first execution of NOLOCK suspends this activity, and a second execution of NOLOCK during a batch run causes lock record processing to revert to the standard mode.

Note: This program must not be used in a batch run if concurrent online access via CBSVO is possible.

Unlock a system lock record---UNLOCK

The UNLOCK utility unlocks a system-lock record. This emergency program is only used in the rare instance of an abend (abnormal end) condition.

Once you access a company, employee, or tax record, the system temporarily 'locks' that record on FILE01. Other users can read the locked record, but cannot update it until the system releases or 'unlocks' it.

If an abend occurs, the record is retained locked on FILE01 and is referred to as a ZL record. You use the Command Entry dialog with the UNLOCK program to release the record. You must specify the record key of the record to be unlocked.

Unlock Menu records---FIXMMN

Occasionally, the menu records will lock up when more than one person attempts to edit them. When this occurs, run the Unlock Menu records program.

Run this program by selecting:

When the process has completed a '--Menu Editor In Process Flag Reset--' message is displayed.

Update the Client Data File---UPDTCL

This program updates the currently active Client Data File (FILECL) with any changes posted to the System Control Repository since the most recent sign-on involving this specific Client Data File.

☞ *For more information on this program, refer to* **Maintaining the Client Data File** *(on page 247).*

See also:

- Updating the Client Data file ***(on page 254)***

To learn how to update the client Data File on the client computer

View a Specified Type of System Control Repository Record---DISPLY)

This utility is used to view a specified type of System Control Repository (Control File; FILE01) record. Records can be viewed online or in a printed report.

See also:

- Using the online DISPLY utility ***(on page 135)***

To display a System Control Repository object

View online output from Query record---VIEW

This program enables you to view online the output from the Requesting Reports and Queries Online (SUBMIT) program.

You can display the first or last 80 positions of a report or query record. You can page up or down in a report or query. However, when you display the last printed page of output, the system prevents you from returning to a previous page.

☞ *For more information on this program, refer to* **Running Report Options** *(on page 275).*

APPENDIX K

Analyzing and Editing the Difference File

In This Appendix

Introduction

This section discusses analyzing and editing the difference file.

The difference file is generated when you run the Change Control Facility Maintenance Output (MAINTO), which compares your current System Control Repository with the Cyborg-delivered sequential System Control Repository (DEMO0105) for the same version.

The difference file contains records of changes you have made to the System Control Repository on your current Cyborg release.

You must analyze the difference file and reconcile its contents with the Cyborg-delivered sequential DEMO0105.

Usage

An output listing is produced in FILE10, which you can then use to locate areas of customized code. For example, when you are migrating to version 4.5 from version 3.0, your MAINTO input files would include the Cyborg-delivered 3.0 sequential DEMO0105 and your production 3.0 System Control Repository.

You will edit the file before running the MAINTI jobstream. The edited difference file contains the changes you want to carry forward to the next version of the System Control Repository. It is input to the step that includes the MAINTI jobstream.

Column 80 of each line in this report will contain a change code that indicates the type of difference between the original System Control Repository and the customized System Control Repository. Each record relates to the sequential DEMO0105.

The possible indicator codes are:

Blank The record was added to your production System Control Repository. The record does not exist on the Cyborg-delivered sequential DEMO0105.

A The record was added to your production System Control Repository. The record does not exist on the Cyborg-delivered sequential DEMO0105.

C The record is present on your production System Control Repository and the Cyborg-delivered sequential DEMO0105. The record's contents has changed from the Cyborg-delivered sequential DEMO0105.

D The record was deleted from your production System Control Repository. The record is present on the Cyborg-delivered sequential DEMO0105.

Program temporary fixes (PTFs) will also display in your MAINTO output. These are identified by the PTF number in positions 76–79. Disregard these lines; the PTFs have already been applied to the delivered version 4.5 code.

Output example:

```
    1         2         3         4         5         6         7         8
1...5....0....5....0....5....0....5....0....5....0....5....0....5....0....5....0
F BENEFIT-MAX-AGE     B4enter 650000.                                          C
F RETRO-START         B2format.                                                A
F RM-BEGIN-DATE       A4WRITER process.                                        D
B042750/B/  01    FILE24-RECORD.                                          5003
B042760/B/   05    FILLER          PIC X(512).                            5006C
C043000/C/+I   05      COMM-U              PIC(X)     VALUE `_'.          5007D
.
.
.
```

MAINTO file record types

This section addresses the various types of records in the difference file.

Cyborg recommends you partition the difference file into separate files by record type, especially for option list (C), field name (F), table (T), and program (P) records.

After editing the files, you can run the JMAINTI jobstream for each of these difference files and check the results in FILE03 after each execution.

The following chart describes the various types of records in the difference file and advises you whether to retain or delete them.

Security records are not addressed here.

MAINTO file record type examples

Record Type Code - Pos. 1	Record Scndry Type Code	Function	Example	Likely Action	Reason	Notes
A		Machine Parameter	·····2····7·····8 1·····5····2·····0 A.A.COMPUTER...PC...T2.5...C	Delete	Cyborg delivered and controlled	For T&A only users (no PR, HR, and so forth), sign on, using EDIT, change H3.0 to T3.0
B		Working Storage Expansion	·····2·····8 1·····2·····0 B.000803-24...24656.....C	Delete	Cyborg delivered	Execute 3.0 EXPAND form with values from current version
C		Option list Records	·····8 1·····0 C.PR07.007000003.....A	Retain	These records have been added for your application of the Cyborg System	See Note 1.
Cn	n (Pos. 2)	Option list with Country Code	·····8 1·····0 C0PR07.007000003.....A	Retain	Country specific option list records added for your application of the Cyborg System	'n' in Pos. 2 denotes a one position numeric country code. See also Note 1.
D		HRM System Default	·····8 1·····0 D010001.....A	Retain	HR default data for your application	Pos. 2–7 contain the records C-1-2. Delete D999999 records.

Record Type Code - Pos. 1	Record Scndry Type Code	Function	Example	Likely Action	Reason	Notes
ETL		Relational Table View & Elements	```.....8 1.....0 ETLX100.....A```	Retain	Contains table record view name	Defined on VIEWNM form
EXT		PAYXTR/ PAYMRG table data selection record	```.....8 1.....0 EXT00ALL.....D```	Retain	Specifies data to be extracted for payrun	See ***Performance Tuning for Relational Databases*** (on page 351).
F		Field Table	```.....6.....8 1.....5.....0 FCONTROL-3...PR01Y.....C```	Retain custom Cyborg field tables. Delete non-cust omized Cyborg field tables		See Note 2.
J		Trans- action Log Records	```.....1.....8 1.....7.....0 J970808...01000101-SCR.....A```	Delete	Used to restore Master File data in case of system failure	

Record Type Code - Pos. 1	Record Scndry Type Code	Function	Example	Likely Action	Reason	Notes
MCL		Client Data File (versions 4.5 and 4.0 FILECL32, version 3 FILECL) Updates	.....2.....8 1.....5.....0 MCL199708080830...C PR07.. A	Delete	Client Data File is rebuilt at time of upgrade	See ***Maintaining the Client Data File*** (on page 247).
MMN		GUI Menu Records	.....2.....8 1.....5.....0 MMNP3...NH-SCR...H05&Ne....A	Retain	Provides customized GUI menus	
P	space (Pos. 9)	Cyborg Scripting Language (EL) Source	.....1.....8 1.....0.....0 P.XGGSCR.00100..ZDELETE-...A	Retain		See Note 3.
P	C, D, J, K, L, M, N, Q, R, S, T, or W (Pos. 9)			Retain		See Note 3.
P	E (Pos. 9)	RELOAD messages	.....8 1.....0 P.XGGSCRE...RELOAD IS OK...A	Delete	Regenerated through JMAINTI/ JRELOAD process	

Record Type Code - Pos. 1	Record Scndry Type Code	Function	Example	Likely Action	Reason	Notes
P	G (Pos. 9)	CSL (EL) Source Generated	```.........................8 1.........................0 P.XGGSCRG000000...SET.SCR..A```	Delete	Regenerated through JMAINTI/ JRELOAD process	
P	H (Pos. 9)	PTF History	```1.......................... P.HHISCRH52100..PTF.ST25210.```	Delete	Not applicable to new release	Identifies P record changes that are Cyborg PTFs.
P	X (Pos. 9)	Object Code	```...........2.............8 1..........1.............0 P.XGGSCRX...55.RECORDS.....A```	Delete	Regenerated through JMAINTI/ JRELOAD process	
P	+ (Pos. 3)	Calculation option list source code	```.........................8 1.........................0 P.+BA14..01990.IF.BA-TYP...A```	Delete	Regenerated through JMAINTI/ JRELOAD process	
P	<CTRL RT (Pos. 3-9)	SUBMIT & VIEW data records	```.............2.........8 1.............3.........0 P.<CTRLRTUSERA...SECSET....A```	Delete	Regenerated by user on SUBMIT form	
P	<REFE RT (Pos. 3-9)	Solution View X-Ref Records	```.........................8 1.........................0 P.<REFERTLN7..0DXDESC......A```	Retain	Used with Solution View on user segments	

Record Type Code - Pos. 1	Record Scndry Type Code	Function	Example	Likely Action	Reason	Notes
PC		Organization inclusion list	.....8 1.....0 PC0100011A-RPT.....A	Retain	Specifies valid reports for an organization	
PD		Organization Report Scheduling Records	.....8 1.....0 PDHRTABL010001.....A	Retain	Specifies organization (s) for a report schedule	
PE		Report Group Records	.....8 1.....0 PEWEEKLY85-RPT.....A	Retain	Establishes report schedule records	
PI		Variant Country Form	.....2.....8 1.....5.....0 PIXGGSCR1..XGG@CA.....A	Retain		
PM		POSTIT/ READIT messages	.....2.....8 1.....0.....0 PMUSER0970809...Lunch.at...A	Depends on your requirements.		
PP		User Options	.....3.....8 1.....0.....0 PPUSER...999999.....A	Retain	Operator ID defaults	MYOPTS

Record Type Code - Pos. 1	Record Scndry Type Code	Function	Example	Likely Action	Reason	Notes
PR		Position Control	.....8 1.....0 PR000131000.....A	Retain	Contains data for application of Position Control module	See Note 4.
Q	XX (Pos. 2-3)	Alternate Key	.....2.....8 1....3.....0 QPE...99010001SMITH,.SAMA..A	Delete	Regenerated by cross reference key rebuild	'XX' denotes alphanumeric 0–9 and A–Z. See ***Maintaining Cross-Reference Keys*** (on page 229).
R		Report Format Control	.....8 1.....0 R.XUSR23001EMPLOYEE.....A	Delete	Regenerated through JMAINTI/ JRELOAD process	
RFM		Field Table Menu	.....2.....8 1.....5.....0 RFM1699QRUSER...Operator.. A	Retain	User quick reference menu; also stores relational table names	
RFT		Field Table Cross Reference	.....2.....8 1.....5.....0 RFT36USN8...XDATE1.....A	Retain; or delete and run F-XREF after JMAINTI		

Record Type Code - Pos. 1	Record Scndry Type Code	Function	Example	Likely Action	Reason	Notes
RQM		Solution View Query spec	```.....8 1..4.....0 RQMXSVQRYDLZFANNUAL-SALARY.A```	Retain	Contains Solution View query specification records	Solution View query pgm. Name is in pos. 4–9 (for example, XSVQRY). See also Note 5.
RRM		Solution View Report spec	```.....8 1..4.....0 RRMXSVR01DEER..EMPLOYEE-N..A```	Retain	Contains Solution View report specification records	Solution View report pgm. Name is in positions 4–7 plus constant PT (for example, XSVRPT). See also Note 5.
RSM		Solution View Form spec	```.....8 1..4.....0 RSMXSVSCRE0FF.EMPLOYEE-NA..A```	Retain	Contains Solution View form specification records	Solution View form pgm. Name is in positions 4–9 (for example, XSVSCR). See also Note 5.
RT		Report Output Position/ Totaling	```.....8 1..4.....0 RTXSVR001EMPLOYEE-NUMBER...A```	Retain	Contains print and totaling records for custom P record reports.	Report pgm. Name is in positions 4–7; constant PT (for example XSVRPT) is implied. See also Note 4.
RXM		Solution View Extract spec	```.....8 1..4.....0 RXMXSVX00DEE..EMPLOYEE-NU..A```	Retain	Contains Solution View extract specification records	Solution View extract pgm. Name is in positions 4–7 plus constant XT (for example, XSVXXT). See also Note 5.

Record Type Code - Pos. 1	Record Scndry Type Code	Function	Example	Likely Action	Reason	Notes
T, U, W, and X		Table	.....8 1.....0 TAxxxx.....A	Retain		See note 4.
ZE		Relational Database Error	.....6.....8 1.....2.....0 ZE999999...LZF203L31.....A	Delete	Informative records only	See ***Data Structures and Processing Modes*** (on page 45).
ZL		Locked Records	.....8 1.....0 ZL999999D.....A	Delete	System generated, temporary records	

Notes

1. You must identify your custom option lists and your changes to Cyborg-delivered option lists.

Refer to **Naming Conventions** *(on page 465) for more information.*

2. You must identify your custom fields and your changes to Cyborg-delivered fields.

   It may have been necessary to customize Cyborg field table names. Three examples of this follow:
   - Edit Routines—Positions 55–60 contain a custom field edit routine.
   - Option list Name—Positions 65–69 contain a option list name other than what was delivered by Cyborg.
   - Field Security—Positions 77–78 contain a field security code.

Note: Non-customized Cyborg field names are those changed by Cyborg as a result of a Program Temporary Fix (PTF).

Refer to **Naming Conventions** *(on page 465) for more information.*

3. If your customized Cyborg P records do not conform to Cyborg naming conventions, you must identify customizations to Cyborg delivered P records and determine whether to migrate those changes to the newer version.
   - The resequencing of P records may be required.
   - Cyborg delivered changes (for example PTF) are deleted. Positions 76–79 contain a Cyborg PTF (for example, 5210 refers to ST25210).
   - Please test the affected Cyborg form/program. If you identify a problem, please contact National Telephone Support for further assistance.

Refer to **Naming Conventions** *(on page 465) for more information.*

4. You must identify the various table records you have added to the Cyborg system. T records are in the format TX, where 'X' denotes the constants A–V, X–Z, '!', '*', and '<'. U records contain a '1' or '2' in position 2. W and X records contain a space in position 2.
5. P and RT records, which are used for programs created using Solution View, may be deleted from the difference file.

Note: If you delete the P and RT records, each Solution View program must be RELOADed from the initial Solution View form.

APPENDIX L

Disk Requirements Worksheets

In This Appendix

Introduction

The tables below show an example for an Oracle database of the overhead space required for each of the tables.

To calculate the space required, multiply the average row length by the number of occurrences for each table.

To calculate the overhead space required for each of the indexes, multiply the number of rows in each table by 15%.

Table 1

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
D	COMPANY	30	356	389
DB	CO_EARN_DED_RULE	31	221	255
DCAF	PAY_PROCESS_OPT	40	127	170
DCAG	PAY_STUB_MESSAGE1	3	73	79
DCAH	PAY_STUB_MESSAGE2	3	73	79
DCAJ	PAY_FREQUENCY	23	272	298
DCAK	GL_ACCOUNT_NBRS	9	84	96
DCAL	PAY_DOC_PRINT	6	93	102
DCAM	COMPANY_ROE	10	63	76
DD	PAYROLL_REPT_DEFN	18	33	54
DIDX	DIDX	4	204	211
TABLE 1				
TABLE 5 INDEXES				
TABLE 1 TOTAL				

Table 2

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
F	F_OTHER_RECORD	5	86	94
G	G_OTHER_RECORD	5	86	94
W	W_OTHER_RECORD	6	86	95
X	X_OTHER_RECORD	6	86	95
TABLE 2				
TABLE 4 INDEXES				
TABLE 2 TOTAL				

Table 3

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
H	TAX_SPECIFICATION	41	758	802
H4	TAX_TABLE_DEFN	23	456	482
H5	TAX_TABLE_BRACKET	9	148	160
HIDX	HIDX	5	204	212
TABLE 3				
TABLE 3 INDEXES				
TABLE 3 TOTAL				

Table 4

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
MEE	EMPLOYEE	28	107	138
MEEA	EMPLOYEE_PAYMT	17	196	216
MEEB	EMPLOYEE_TRANSFER	8	84	95
MF	NAME_ADDRESS	9	158	170
MG	PAY_ALLOCATIONS	10	86	99
MH	EMP_EARN_DED	28	381	412
MIDX	MIDX	5	204	212
MJ	EMP_TAX_DED	52	827	882
MLO1	DEPENDENT	12	102	117
MLO2	DEPENDENT_EMPLYR	6	79	88
MLO3	DEPENDENT_INSUR	9	75	87
MLO4	EMRGY_CONTACT	7	79	89
MLO5	EMRGY_CONTACT_ADDR	7	79	89
MLO6	EMRGY_PHYSICIAN	7	79	89
MLO7	EMRGY_PHYS_ADDR	7	79	89
MLO8	EEO_6	10	39	52
MLOA	BENEFICIARY	11	101	115
MLOB	BENEFICIARY_ADDR	6	79	88
MLOC	BENEFICIARY_CITY	6	54	63
MLOD	COVERED_DEPENDENTS	21	74	98
MLOF	APPLICANT	12	112	127
MLOG	APPLCNT_REFERENCE	11	101	115
MLOH	APPLCNT_REF_ADDR	8	97	108
MLOI	JOB_APPLIED_FOR	16	113	132
MLOJ	WORK_PREFERENCES	21	168	192
MLOZ	EMP_FLEX_PLN_CR_PR	14	167	184
MLPB	V80_INSURANCE	14	150	167
MLPC	V80_MED_COVERAGE	11	60	74
MLPD	V80_BENEFIT	18	209	230
MLPH	SALARY_CHANGE	19	239	261
MLPM	EMP_INCUMBENCY	19	156	178
MLPQ	CAN_EMP_EQUITY	11	57	71

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
MLPR	V80_INJURY_DISABLE	15	117	135
MLQ0	EMP_RETIREMENT	13	70	86
MLQ1	EMP_WELFARE_PLAN	13	76	92
MLQ2	LEAVE_OF_ABSENCE	10	51	64
MLQ3	EMP_PLAN_SERVICE	14	68	85
MLQ4	EMP_DEFERRED_PLAN	14	63	80
MLQ5	EMP_PLAN_CONTRIB	20	171	194
MLQ6	PENSION_BENEFIT	16	118	137
MLQ7	PENSION_PROJCTION	15	225	243
MLQ8	EMP_PLAN_COVERAGE	12	123	138
MLQ9	EMP_PLAN_VESTING	9	69	81
MLQA	TS_FUND_ALLOCATION	16	211	230
MLQB	TS_FUND_ACCUM	17	191	211
MLQC	TS_FUND_ACTIVITY	15	111	129
MLQD	TS_FUND_TRANSFER	11	59	73
MLQE	DC_CONTRIBUTION	14	134	151
MLQF	TS_FUND_BALANCE_1	14	182	199
MLQG	TS_FUND_BALANCE_2	14	168	185
MLQH	TS_FUND_SHARE	11	116	130
MLQI	DB_PLAN_ACCUM	16	190	209
MLQJ	DB_ACCT_BALANCE	13	181	197
MLQK	DB_ACCT_ACTIVITY	8	71	82
MLQL	DC_PLAN_ACCUM	16	190	209
MLQM	DC_ACCT_ACTIVITY	14	110	127
MLQN	DC_ACCT_TRANSFER	9	57	69
MLQO	EMP_FLEX_CREDITS	17	191	211
MLQP	DC_ACCT_BALANCE_1	13	181	197
MLQQ	DC_ACCT_BALANCE_2	13	181	197
MLQR	AVG_DEFERRAL_PCT	13	184	200
MLQS	BENEFICIARY_PCT	21	226	250
MLQT	FSA_ACCT_BALANCE	14	166	183
MLQU	FSA_CLAIM	15	167	185
MLQV	HIGHLY_PAID_DEF_1	19	131	153
MLQW	HIGHLY_PAID_DEF_2	11	35	49
MLQX	FINAL_AVG_EARNINGS	9	93	105
MLQY	COBRA_QUALIFY_EVNT	15	96	114

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
MLQZ	J_S_BENEFIT_WAIVER	14	90	107
MLR0	SHARE_DISTRIBUTION	14	128	145
MLR1	SHARE_WITHDRAWAL	18	138	159
MLR2	SHARE_ACCT_BALANCE	11	115	129
MLR3	STOCK_CASH_BALANCE	14	128	145
MLR4	SAVINGS_BOND	9	51	63
MLR5	ALT_COMP_TOTALS	11	151	165
MLRA	EMP_ELIGIBILITY	10	57	70
MLRD	DISCIPLINE_ACTION	10	50	63
MLRJ	RELOCATION_1	13	200	216
MLRK	RELOCATION_2	13	200	216
MLRL	RELOCATION_3	21	209	233
MLRM	HOUSE_HUNTING_EXP	17	273	293
MLRN	MOVING_EXPENSE	16	251	270
MLRO	TEMP_LIVING_EXP	17	253	273
MLRP	SHIPPING_EXP	19	262	284
MLRQ	CLOSING_COST_EXP	17	236	256
MLRR	BRIDGE_LOAN	14	174	191
MLRS	POSITION_ASSIGNMT	9	103	115
MLRT	AUTH_TIME_OFF	14	228	245
MLRU	UNAUTH_TIME_OFF	8	96	107
MLT0	EMP_CLASS_REG	9	38	50
MLT1	EMP_TRAIN_REQ	8	32	43
MLT2	EMP_CLASS_RESULT	18	96	117
MLT3	EMP_COURSE_OBJ	25	84	112
MLT4	EMP_TRAIN_SALARY	9	55	67
MLT5	EMP_CLASS_COST	20	154	177
MLTB	ISSUED_BADGE	9	78	90
MLTS	SCHEDULE_ASSIGNMNT	9	80	92
MLVA	ABSENCE	15	99	117
MLVE	EEO_4_EXEMPTIONS	6	46	55
MLVG	GRIEVANCE	13	97	113
MLWA	IMAGE_INFORMATION	8	100	111
MLWF	EMPLOYEE_CONTACT	10	106	119
MLYA	EMP_ROE_1	12	107	122
MLYB	EMP_ROE_2	13	108	124

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
MLYC	EMP_ROE_3	14	198	215
MLYD	EMP_ROE_4	10	122	135
MLYE	EMP_ROE_5	6	98	107
MLZ1	FORMAL_EDUCATION	13	163	179
MLZ2	TUITION_REIMBURSMT	18	250	271
MLZ3	EMP_TRAIN_COURSE	21	153	177
MLZ4	EMP_SKILL	15	73	91
MLZ5	APPL_INTERVIEW	10	82	95
MLZ6	PRIOR_EMPLOYMENT	11	110	124
MLZ7	PHYSICAL_EXAM	15	71	89
MLZ8	PHYSICAL_EXAM_RSLT	15	78	96
MLZ9	APPL_PRE_TRANSFER	18	140	161
MLZA	EMPLOYEE_1	16	118	137
MLZB	CITIZENSHIP	17	103	123
MLZC	EMPLOYMT_ACTIVITY	18	92	113
MLZD	JOB_ASSIGNMENT	11	103	117
MLZE	BONUS	12	94	109
MLZF	SALARY	19	250	272
MLZG	PERFORMANCE_RATING	17	123	143
MLZH	NON_MONETARY_PERQ	9	82	94
MLZI	ASSIGNED_PROPERTY	9	82	94
MLZJ	ASSIGNED_AUTO	12	119	134
MLZK	EXIT_INTERVIEW	9	103	115
MLZL	DRIVERS_LICENSE	10	75	88
MLZM	HEALTH_CONDITION	17	61	81
MLZN	CERTIFICATION	9	47	59
MLZO	PROFESSIONAL_ASSOC	7	44	54
MLZP	PLANNED_SALARY	17	176	196
MLZQ	SALARY_REVIEW	10	86	99
MLZR	EMP_LOCATION	15	85	103
MLZS	SCHEDULED_APPRSL	10	86	99
MLZT	MONETARY_PERQ	10	94	107
MP	PAY_PERIOD	7	89	99

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
TABLE 4				
TABLE 2 INDEXES				
TABLE 4 TOTAL				

Table 5

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
NEE	EMPLOYEE_LH	29	111	143
NEEA	EMPLOYEE_PAYMT_LH	18	200	221
NF	EMP_NAME_ADDR_LH	6	72	81
NG	EMP_LOCATION_LH	11	90	104
NH	LABOR_HIS_EARN_DED	7	86	96
NIDX	NIDX	6	204	213
NJ	LABOR_HIS_TAX_DED	13	203	219
NLG1	LABOR_DIST_SPLIT1	5	88	96
NLG2	LABOR_DIST_SPLIT2	5	88	96
NLG3	LABOR_DIST_SPLIT3	5	88	96
QEE	EMPLOYEE_MM	29	111	143
QEEA	EMPLOYEE_PAYMT_MM	18	200	221
QF	EMP_NAME_ADDR_MM	10	162	175
QG	EMP_LOCATION_MM	11	90	104
QH	EMP_EARN_DED_MM	29	385	417
QIDX	QIDX	6	204	213
QJ	EMP_TAX_DED_MM	53	831	887
TABLE 5				
TABLE 1 INDEXES				
TABLE 5 TOTAL				

Table 6

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
UDS1	NODE_CONTROL_TABLE	5	28	36
UDS2	MACHINE_PARAMETERS	3	6	12
UDS3	DISTRIB_ACCES_LOG	7	78	88
UDS4	DISTRIBUTION_RULES	5	23	31
URT01	REQ_BASIC_DETAILS	15	91	109
URT11	REQ_CAND_BASIC	12	70	85
URT12	REQ_CAND_BASIC_2	7	72	82
Y40FN	FIELD_NAMES	19	161	183
YPR0	POSITION_HEADER	10	18	31
YPR1	POSITION_CTL_BASIC	16	93	112
YPR2	POSITION_FROM_DATA	8	62	73
YPR3	POSITION_TO_DATA	8	62	73
YPR4	POSITION_NARRATIVE	5	75	83
YPR5	POSITION_DEPT	17	122	142
YPR6	POSITION_BUDGET_PC	12	144	159
YPR7	POSITION_ACTUAL	13	181	197
YPR8	POSITION_REQ	14	117	134
YPR9	POSITION_INCUMBENT	15	101	119
YPRH	POSITION_CTRL_HDR	3	35	41
YPRS	POSITION_CTL_SKILL	15	63	81
YT	ACCRUAL_SELECTION	14	72	89
YT_A	COURSE_DEVP_COST	5	82	90
YT_AB	ABSENCE_EARN_CODE	11	74	88
YT_ARA	ACCRUAL_ROUTINE	19	269	291
YT_ARB	ACCRUAL_ROUTINE_B	11	211	225
YT_ARC	ACCRUAL_ROUTINE_C	8	145	156
YT_C_A	COORDINATOR	5	62	70
YT_C_B	COORDINATOR_B	9	62	74
YT_C_C	COORDINATOR_C	6	63	72
YT_C_D	COORDINATOR_D	11	60	74
YT_C_E	COORDINATOR_E	11	60	74
YT_C2A	CREW_ROTATION_08_A	28	83	114

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
YT_C2B	CREW_ROTATION_08_B	31	64	98
YT_C2C	CREW_ROTATION_08_C	11	24	38
YT_C3A	CREW_ROTATION_14_A	28	83	114
YT_C3B	CREW_ROTATION_14_B	31	64	98
YT_C3C	CREW_ROTATION_14_C	31	64	98
YT_C3D	CREW_ROTATION_14_D	26	54	83
YT_D_A	COURSE_OFFERING	8	74	85
YT_D_B	COURSE_OFFERING_B	23	149	175
YT_D_C	COURSE_OFFERING_C	20	74	97
YT_D_D	COURSE_OFFERING_D	21	119	143
YT_D_E	COURSE_OFFERING_E	17	104	124
YT_D_F	COURSE_OFFERING_F	7	73	83
YT_EC	TA_EARN_CODE	6	56	65
YT_N_A	COURSE_PROVIDER	4	66	73
YT_N_B	COURSE_PROVIDER_B	8	64	75
YT_N_C	COURSE_PROVIDER_C	4	54	61
YT_N_D	COURSE_PROVIDER_D	10	64	77
YT_N_E	COURSE_PROVIDER_E	10	64	77
YT_P	POLICY_ACTIVITY	27	462	492
YT_P_A	PROGRAM_SCHEDULE	15	62	80
YT_P_B	PROGRAM_SCHEDULE_B	15	62	80
YT_P_C	PROGRAM_SCHEDULE_C	15	62	80
YT_P_D	PROGRAM_SCHEDULE_D	15	62	80
YT_P_E	PROGRAM_SCHEDULE_E	14	61	78
YT_P_F	PROGRAM_SCHEDULE_F	4	64	71
YT_PT	POLICY_TABLE	15	129	147
YT_R	COMPANY_XREF	3	50	56
YT_RP	ROSTER_QUERY_PARMS	6	84	93
YT_S	SCHEDULE_ACTIVITY	27	462	492
YT_S_A	CLASS_SCHEDULE	16	155	174
YT_S_B	CLASS_SCHEDULE_B	18	184	205
YT_S_C	CLASS_SCHEDULE_C	17	161	181
YT_S_D	CLASS_SCHEDULE_D	16	86	105
YT_S_E	CLASS_SCHEDULE_E	7	75	85
YT_SP	SHIFT_PREMIUM	22	158	183
YT_ST	SCHEDULE_TABLE	13	126	142

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
YT_T	TRAINING_REQUIRED	6	26	35
YT_X	CANCEL_COURSE_BOOK	18	124	145
YT_Y	CLASS_EVALUATION	19	88	110
YT_Z	COURSE_BOOKING	18	124	145
YT0A01	POSITION_BASIC	12	92	107
YT0A02	POSITION_BASIC_02	7	75	85
YT0A03	POSITION_EVAL	8	93	104
YT0A04	POSITION_EVAL_CRIT	8	78	89
YT0A05	POSITION_SKILLS	15	63	81
YT0A06	POSITION_MEMBERSHIP	7	73	83
YT0A07	POSITION_LICENSES	7	73	83
YT0A08	POSITION_EDUCATION	8	77	88
YT0A09	POSITION_NEXT_JOB	7	75	85
YT0A10	POSITION_DOC_REF	8	90	101
YT0A11	POSITION_REQ_EXP	8	74	85
YT0A12	POSITION_MISC_DATA	12	65	80
YT0A13	POSITION_REQ_TRAIN	7	75	85
YT0A50	POSITION_STATUS	8	50	61
YT0A51	POSITION_LOCATION	9	61	73
YT0A52	POSITION_FUND	11	110	124
YT0A53	POSITION_VEHICLE	10	95	108
YT0A54	POSITION_NEXT_REVW	8	78	89
YT0A55	POSITION_FTE	9	127	139
YT0A56	POSITION_COMPLEMNT	8	105	116
YT0B01	ORG_UNIT_BASIC	11	83	97
YT0B02	ORG_UNIT_LVL_NAME	6	69	78
YT0B03	ORG_UNIT_FTE	9	127	139
YT0B10	ORG_UNIT_DOC_REF	8	90	101
YT0B99	ORG_UNIT_DEF_NAME	6	69	78
YT0D01	JOB_BASIC	11	91	105
YT0D02	JOB_BASIC_02	8	85	96
YT0D03	JOB_EVALUATION	8	93	104
YT0D04	JOB_EVAL_CRIT	8	78	89
YT0D05	JOB_SKILLS	8	82	93
YT0D06	JOB_MEMBERSHIP	7	73	83
YT0D07	JOB_LICENCES	7	73	83

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
YT0D08	JOB_EDUCATION	8	77	88
YT0D09	JOB_NEXT_JOB	7	75	85
YT0D10	JOB_DOC_REF	8	90	101
YT0D11	JOB_REQ_EXP	8	74	85
YT0D13	JOB_REQ_TRAINING	7	75	85
YTA__A	JOB_CODE	14	94	111
YTA__B	JOB_CODE_B	12	79	94
YTBA	SALARY_GRADE_ANN	12	152	167
YTBB	SALARY_GRD_PAY_PD	13	174	190
YTBC	SALARY_GRADE_HRLY	12	173	188
YTC__A	JOB_EVAL_PROFILE	23	267	293
YTC__B	JOB_EVAL_PROFILE_B	10	98	111
YTDC1	SALARY_INC_DEFN_1	13	152	168
YTDC2	SALARY_INC_DEFN_2	14	153	170
YTDC3	SALARY_INC_DEFN_3	19	284	306
YTDC4	SALARY_INC_DEFN_4	19	284	306
YTDR1	SALARY_INC_DEFN_5	13	152	168
YTDR2	SALARY_INC_DEFN_6	14	153	170
YTDR3	SALARY_INC_DEFN_7	19	284	306
YTDR4	SALARY_INC_DEFN_8	19	284	306
YTDT1	SALARY_INC_DEFN_9	13	152	168
YTDT2	SALARY_INC_DEFN_0	14	153	170
YTE	OCCUPATION_GROUP	8	24	35
YTF	ADJ_EMP_STATUS	24	51	78
YTG	SYSTEM_OPTIONS	19	30	52
YTH	SALARY_PLAN	8	66	77
YTI	SALARY_GRADE	11	120	134
YTJ__A	PLAN_RETIRE_RULE	15	76	94
YTJ__B	PLAN_RETIRE_RULE_B	14	50	67
YTK__A	BENEFIT_PLAN	16	70	89
YTK__B	BENEFIT_PLAN_B	14	48	65
YTL	PLAN_ELIGIBILITY	23	87	113
YTM	COVERAGE_COST	14	138	155
YTN__A	PLAN_PARTICIPATE	17	110	130
YTN__B	PLAN_PARTICIPATE_B	15	63	81
YTO	ACCUMULATOR_RULES	40	51	94

VIEW	TABLE	# OF ATTR	AVG BYTES/ROW	AVG ROW LENGTH
YTP	MASTER_PLAN	22	68	93
YTQ	ANNUITANT_FACTOR	18	281	302
YTRA	PLAN_INTEREST_RATE	9	123	135
YTRB	FUND_INTEREST_RATE	8	103	114
YTRC	PLAN_ALLOC_METHOD	16	115	134
YTRD	FUND_ALLOC_METHOD	12	68	83
YTS	PLAN_EARN_DED_RULE	16	141	160
YTT	PLAN_OPT_ACTIVITY	29	77	109
YTU__A	BREAK_IN_SVC_RUL	25	228	256
YTU__B	BREAK_IN_SVC_RUL_B	15	122	140
YTV	DISCRIMINATION_TST	16	148	167
YTW_A	PRIOR_YEAR_TOTAL	8	125	136
YTW_B	PRIOR_YEAR_TOTAL_B	9	147	159
YTX__A	EEO_ESTABLISHMNT	12	65	80
YTX__B	EEO_ESTABLISHMNT_B	7	65	75
YTX__C	EEO_ESTABLISHMNT_C	7	69	79
YTX__D	EEO_ESTABLISHMNT_D	9	126	138
YTX__E	EEO_ESTABLISHMNT_E	10	148	161
YTY	EEO_STATISTICS	19	301	323
YTZ	COVERAGE_COST_B	9	68	80
YTZAX	HR_TABLE_CTRL	13	55	71
YTZAY	BENEFIT_TABLE_CTRL	14	61	78
YTZAZ	ACCRUAL_TABLE_CTRL	3	17	23
YU1	FLEX_CREDIT_CALC	19	46	68
YU2	FLEX_PLAN_OPTS	18	47	68
ZCSC12	CODESET_C12	8	75	86
ZCSUNV	CODESET	6	75	84
TABLE 6 TOTAL				
TABLE 7 TOTAL				
TABLE 0 TOTAL				

APPENDIX M

Accessing PTFs on the Cyborg Users Bulletin Board (CUBBS)

In This Appendix

PTF

A PTF is a **P**rogram **T**emporary **F**ix designed to correct a software problem

PTFs are created by Cyborg Systems as a result of problems reported by clients as well as Cyborg employees.

PTFs are posted on the Cyborg User Bulletin Board Systems (CUBBS) accessible from the Cyborg website, www.Cyborg.com.

PTFs are downloaded in ZIP file format. Each zipped file contains a instructional document as well as the software program fix.

Always read the instructional document carefully before applying any PTF.

Other file types contained in the ZIP file may be:

- .doc or .txt (read me)
- .dat (program files)
- .sat (**s**creen **a**ppearance **t**able)
- .04 (control records)

Locating PTFs on CUBBS

Accessing CUBBS

Note: Cyborg Systems, Inc. periodically refreshs the look of its web site, so the instructions that follow may vary slightly from those that may be needed to access CUBBS via the Cyborg web site in the future. Please contact Customer Support at 312.279.6600 if you need help navigating the site.

1. Using a web browser, go to www.Cyborg.com

2. Click the Services link

3. Click the Support link

4. Click the CUBBS link

5. Click 'Log-in to CUBBS'

6. Enter User Name and Password

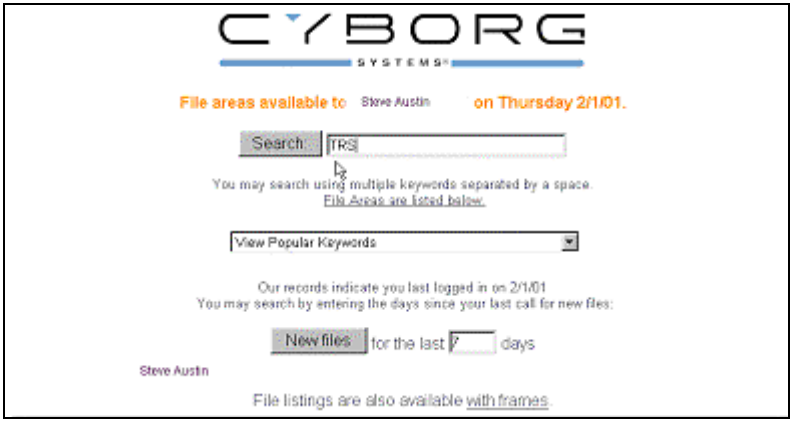
Note: If you have not received a CUBBS password, please contact Customer Support at Cyborg Systems, Inc., 312.279.6000.

8. Select File Areas

PTF search methods---alphanumeric search

There are several ways to locate PTFs on CUBBS.

1. Type an alphanumeric string in the search box

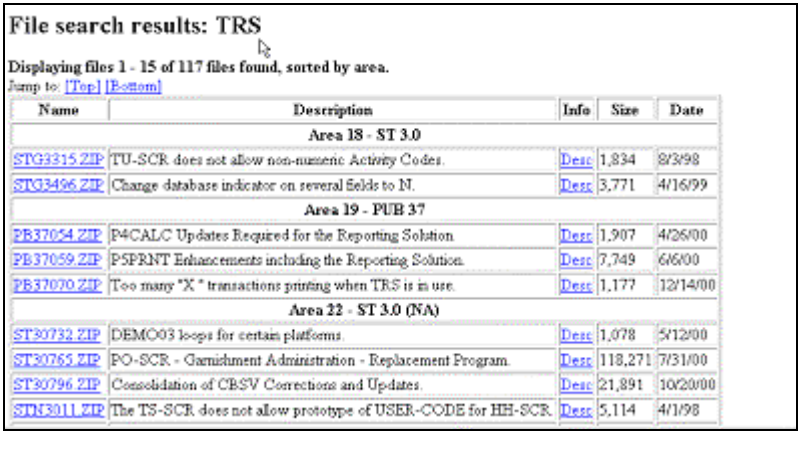


You may enter the PTF number if you know it or a screen name or any key phrase in the search box.

2. Click Search

Click on the Search button to execute your alphanumeric search.

If you have performed this search option, you will see a display similar to the following:



File search results: TRS

Displaying files 1 - 15 of 117 files found, sorted by area.

Jump to: [Top] [Bottom]

Name	Description	Info	Size	Date
Area 18 - ST 3.0				
STG3315.ZIP	TU-SCR does not allow non-numeric Activity Codes.	Desc	1,834	8/3/98
STG3496.ZIP	Change database indicator on several fields to N.	Desc	3,771	4/16/99
Area 19 - PUB 37				
PB37054.ZIP	P4CALC Updates Required for the Reporting Solution.	Desc	1,907	4/26/00
PB37059.ZIP	P5PRNT Enhancements including the Reporting Solution.	Desc	7,749	6/6/00
PB37070.ZIP	Too many "X" transactions printing when TRS is in use.	Desc	1,177	12/14/00
Area 22 - ST 3.0 (NA)				
ST30732.ZIP	DEMO03 loops for certain platforms.	Desc	1,078	5/12/00
ST30765.ZIP	PO-SCR - Garnishment Administration - Replacement Program.	Desc	118,271	7/31/00
ST30796.ZIP	Consolidation of CBSV Corrections and Updates.	Desc	21,891	10/20/00
STN3011.ZIP	The TS-SCR does not allow prototype of USER-CODE for HH-SCR.	Desc	5,114	4/1/98

Click on the Info heading for a file that gives details about the PTF size, number of downloads, last accessed date, and name of the person at Cyborg who uploaded the file to CUBBS.

Note: If you searched by this option, the results will be listed in Area (version) order. You should scroll to the appropriate version to locate the PTF you will need for your system.

PTF search methods---list new files

You can limit the number of files retrieved in a search to those new since your last visit to CUBBS.

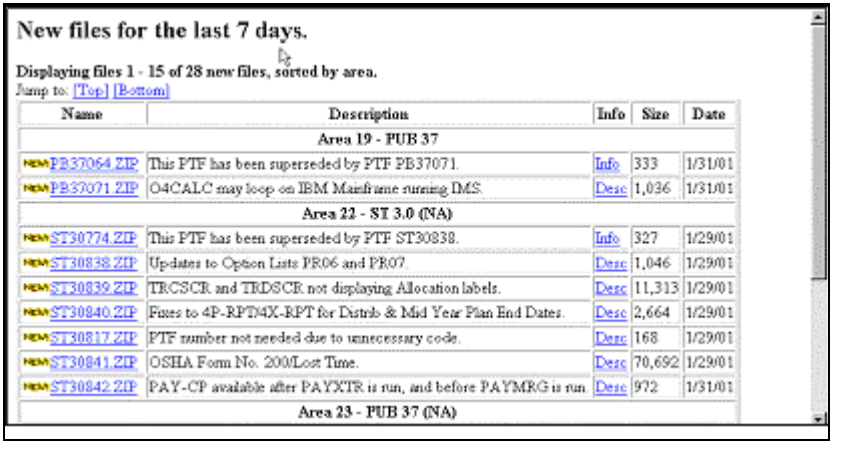
1. Enter number of days since last visit in New Files box

Notice that if you have previously logged into CUBBS, the system will display the date of the last log in to help you limit the number of files to view.

2. Click New files

Click 'New files' to execute the search.

If you have performed this search option, you will see a display similar to the following:



New files for the last 7 days.

Displaying files 1 - 15 of 28 new files, sorted by area.

Jump to: [Top] [Bottom]

Name	Description	Info	Size	Date
Area 19 - PUB 37				
NEW PB37064.ZIP	This PTF has been superseded by PTF PB37071.	Info	333	1/31/01
NEW PB37071.ZIP	O4CALC may loop on IBM Mainframe running IMS.	Desc	1,036	1/31/01
Area 22 - ST 3.0 (NA)				
NEW ST30774.ZIP	This PTF has been superseded by PTF ST30838.	Info	327	1/29/01
NEW ST30838.ZIP	Updates to Option Lists PR06 and PR07.	Desc	1,046	1/29/01
NEW ST30839.ZIP	TRCSCR and TRDSCR not displaying Allocation labels.	Desc	11,313	1/29/01
NEW ST30840.ZIP	Fixes to 4P-RPT04X-RPT for Distrib & Mid Year Plan End Dates.	Desc	2,664	1/29/01
NEW ST30817.ZIP	PTF number not needed due to unnecessary code.	Desc	168	1/29/01
NEW ST30841.ZIP	OSHA Form No. 200/Lost Time.	Desc	70,692	1/29/01
NEW ST30842.ZIP	PAY-CP available after PAYXTR is run, and before PAYMRG is run.	Desc	972	1/31/01
Area 23 - PUB 37 (NA)				

Click on the Info heading for a file that gives details about the PTF size, number of downloads, last accessed date, and name of the person at Cyborg who uploaded the file to CUBBS.

Note: If you searched by this option, the results will be listed in Area (version) order. You should scroll to the appropriate version to locate the PTF you will need for your system.

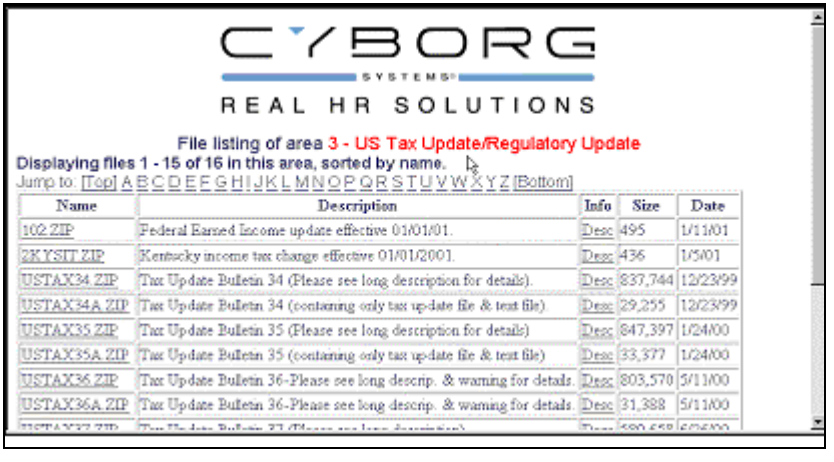
PTF search methods---scroll through the list

On the search screen, after the option to search by number of days is a listing of PTFs by area.

1. Scroll down the list

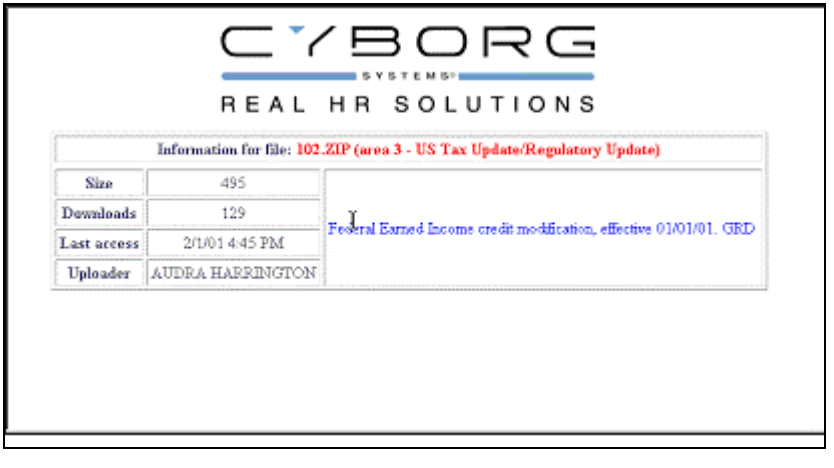
Scroll through the list to find the application or version you wish to review.

2. **Click the topic of interest**
3. **Review the Area**



4. **Click the Info heading for the PTF description**

For example:



Obtaining a PTF

Downloading PTFs

After locating a needed PTF, you must download it to your computer.

1. Click the PTF name

Click on the name of the PTF you need in the file list.

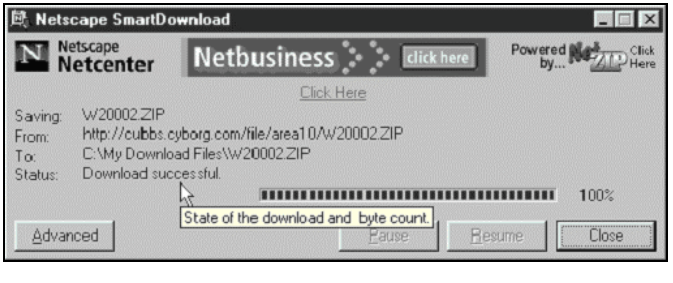
2. Enter User Name and Password (for some PTFs)

The download process will begin after the User Name and Password are authenticated.

The passwords necessary for some PTFs are obtained from Customer Services.

3. Verify that the download was successful

Depending upon the browser you use, you may see a message *similar* to the following when the download has successfully completed.



4. Logoff your browser

Unzip the PTF

1. Unzip the PTF

Using Explorer, locate the PTF zipped file in your download directory (C:\My Download Files in the above example) and double click on it.

2. Extract the files

Place the files in the file of your choosing.

3. Read the text file

Read the .txt or .doc file paying particular attention to the 'Actions' section that outlines the steps necessary to apply the PTF.

Also refer to the instructions in the PTF as well as the information in Identifying Problems and Applying Temporary Fixes for instructions for applying the PTF to your system.

APPENDIX N

Practice and Review Answers

In This Appendix

About this section

This section provides answers for the Apply the Concepts practices and Review of Questions Answered included at the end of each instructional chapter.

System Overview

Review of Questions Answered

1. What is The Solution Series?

   The Solution Series is Cyborg's 'best-in-class' human resource management system (HRMS) offering comprehensive human resource management, payroll processing and time and attendance functionality.

2. What are the components of The Solution Series?

   There are application and data components.

   The Solution Series offers the following application components:

- *Human Resources Administration*
- *Payroll Administration*
- *Time and Attendance Administration*
- *Position Administration*
- *Requisition Administration*
- *Distributed Administration*
- *Reporting Administration*
- *eCyborg Interactive Workforce*

   The Solution Series contains the following data components:

- *Database*
- *Data dictionary*
- *Application Programming Interfaces (APIs)*

3. How is the system organized?

   The Solution Series runs in both online and background processing modes.

   Online processing is the procedure of entering, viewing, or manipulating data through an interactive Solution Series session.

   When entering data online, data is updated in the database instantly. All verification is also performed instantly. If an error occurs, a corresponding message will be displayed with additional information.

   You can think of The Solution Series as having two types of background processing—background processing and payroll background processing.

- *Background processing is the procedure of grouping a number of tasks to be accomplished in a background mode. Processes are executed to read from or write to the online files—System Control Repository, Employee Database, and Client Data File.*
- *Payroll background processing calculates the payroll. In this mode, processing is run against a sequential Employee Database to reduce processing times.*

4. What programs, languages, and tools does the system use?

   Cyborg Scripting Language, COBOL, Report Generators and the CASE tool

   Online application programs (Human Resource, Payroll, Time and Attendance, and utilities) are coded in the Cyborg Scripting Language (CSL), Cyborg Systems' proprietary scripting language.

   Core programs (CBSVB, CBSV0, CBSVBT, CBSVOT, and CBSVRFT) delivered with the system are coded in COBOL.

   For users of the payroll process, there are COBOL programs also:

   P2EDIT

   P4CALC

   P5PRNT

   P9CNVT

   04CALC

   Report generators are used only in the background payroll process and online pay calculation.

   If you are using the relational version of The Solution Series, you will make use of the CASE tool, RDBPGM0. This COBOL program generates the data definition language (DDL) to define the relational database and tables (with associated indexes and views) from The Solution Series Field Name Table.

   In addition, it generates the data manipulation language (DML) to process the data within these tables. All generated DDL and DML use embedded, static SQL.

5. What security options are available?

   Security can be granted or denied, with view and update restrictions, by the following areas:

- *application area*
- *specific parts of the company*
- *specific forms*
- *specific data elements*
- *specific values within a data element*

6. What customization options are available?

   The following customization options are available:

- *User interface utilities*
- *Option lists*
- *Application tables*
- *Tools—Solution View and FormBuilder*
- *Cyborg Scripting Language (Cyborg's scripting language)*

7. What reporting options are available?

   The Solution Series *offers the following reporting options:*

- *Online query and custom reporting*
- *CSL reporting*
- *Third-party reporting*

8. How is the system maintained and upgraded?

   Periodic updates, temporary fixes (PTFs), enhancements and bulletins are available from CUBBS. Utilities are also supplied with the software.

   Periodic updates and temporary fixes are distributed on Cyborg Systems' bulletin board (CUBBS).

   Between releases of The Solution Series, enhancements, and some bulletins, are released to meet customer needs. Depending upon the size of the bulletin, other distribution media may be used.

   Enhancements and bulletins obtained from the bulletin board generally contain the following files:

- *Code file containing the actual code changes*
- *Form Appearance Table (SAT) changes*
- *Documentation file containing an explanation of the code changes*

   Temporary fixes, or PTFs, are resolutions to Problem Notifications (PNs). PTFs are distributed on the bulletin board.

   The Solution Series provides utilities for applying periodic updates, temporary fixes, and new releases. There are also utilities available for general maintenance, including backup utilities.

Data Structures and Processing Modes

Apply the concepts

1. What are the logical subdivisions of records called?

   The logical subdivisions of records are called segments. Each segment contains a particular type of information.

   They are sequentially ordered with a master record.

2. Give an example of a stacked segment.

   A stacked segment is a multiple-occurrence segment.

   Employee earnings and deductions are examples of segments that would occur multiple times during the course of a person's employment.

3. What are the components of a segment key?

   Each segment has a Segment ID of one character.

   Some multiple occurring segments have Segment Codes.

   Segment Keys further identify a particular segment occurrence. The Segment ID (and possibly Segment Code) is always a part of the Segment Key.

4. What are pointers and what purpose do they serve?

   The four main areas of working storage are subdivided into a number of work spaces. These work spaces are called 'pointer spaces' or simply pointers.

   Segments are located by a pointer.

5. Define DDL and DML.

   DDL is data definition language which defines the relational database and tables with associated indexes and views.

   DML refers to the data manipulation language which is used to process the data within the relational tables.

6. What is 'referential integrity' in relation to indexes?

   A collection of properties which should be possessed by data in a relational database.

   For example, in a table of family members, if we enter Ann as a spouse of Steve Austin, we should also enter Steve Austin as a spouse of Ann.

   Similarly, if we remove one end of the relationship we should also remove the other.

7. What is a database 'view'?

   A program that allows a file to be read but not changed.

RDBPGM1 creates a view of each table it generates. In the Cyborg software these views are used internally by CBSV, but you can create your own views of data using SQL.

8. Why should you use the Cyborg naming convention when you modify or create tables, fields, and/or programs?

   To avoid overlaying an existing Cyborg delivered program and/or to distinguish enhancements made to your system by Cyborg consultants or your own programming efforts, use the naming conventions described in Naming Conventions.

Review of Questions Answered

1. What are the major files used in the indexed version?

   The System Control Repository serves as the Control File for The Solution Series. In execution scripts, it is named FILE01. It specifies how you will process human resource and payroll data.

   The Employee Database serves as the Master File for The Solution Series.

2. What are the physical structures of those files?

   The System Control Repository uses an indexed sequential organization. Records are 80 bytes, fixed length.

   The physical record key is 24 bytes. It consists of a 1–3 position record type code and 21–23 additional characters of key information.

   The Employee Database uses an indexed sequential organization.

   Records are variable length, with a maximum length of 3060 bytes. The record key is 32 bytes, which follows a 3-byte record length.

3. What is the purpose of those files?

   The System Control Repository serves as the Control File for The Solution Series. In execution scripts, it is named FILE01. It specifies how you will process human resource and payroll data.

   The Employee Database serves as the Master File for The Solution Series. In execution scripts, it is named FILE02.

4. What record types do those files contain?

   The System Control Repository contains several record types.

   Some records have subsidiary record types. Each record type can be identified by a unique Object Code.

   The Employee Database contains several record types. Some records have subsidiary record types.

Record Key Structures has a complete list of the Employee Database key record structures.

5. How do I display the contents of the System Control Repository?

   To display the first 75 positions of the records within the System Control Repository use the Display Control File form (DSP01).

6. How do I display the contents of the Employee Database?

   To display the first 75 positions of the records within the Employee Database use the Display Application File form (DSP02).

7. How is the relational version organized?

   The relational and indexed versions of The Solution Series look identical to the end user. The relational version consists of the System Control Repository, the Employee Database, the CASE tool, and the physical Cyborg database.

   All option lists and certain application tables stored in the System Control Repository are also stored as relational tables and views.

   In the relational version of Employee Database, company, tax, and employee data are stored in relational database tables. Each company and employee segment equates to a relational table. Stacked segments become multiple rows in a table.

   The CASE tool, RDBPGM0, is a Cyborg-delivered COBOL program that generates the data definition language (DDL) to define the relational database and tables (with associated indexes and views) from The Solution Series data dictionary. In addition, it generates the data manipulation language (DML) to process the data within these tables. All generated DDL and DML use embedded, static SQL.

   The physical database will be created during the installation of the system by the CASE tool, RDBPGM0.

8. What processing modes are used with the system?

   The Solution Series operates in two processing modes—online and background.

9. What required and optional files are used in online mode?

   The required online files are the System Control Repository (FILE01; Control File) and the Employee Database (Master File; FILE02).

   The optional files are the Audit/Report/Message Print File (FILE03), which is optional for the trace program, and User -defined files (FILE23, FILE24, FILE25).

10. What required and optional files are used in background mode?

    The required files used in the background processing mode are:

- *System Control Repository (FILE01),*
- *Employee Master database (FILE02)*
- *Audit/Report/Message Print File (FILE03)*
- *Runs Parameters (FILE04).*

The optional background processing mode files are:

- *Input files (FILE05, FILE11, FILE13, FILE14, FILE24)*
- *Replication Holding file (FILE08)*
- *Output files (FILE 06, FILE07, FILE10, FILE12, FILE15, FILE25)*
- *Alternate print files (FILE17, FILE18, FILE19)*
- *Check print file (FILE31)*
- *Savings bond and COBRA (FILE30, FILE32)*

Setting Up Environments

Review of Questions Answered

1. What preparation is involved for this installation?

   You must complete the following tasks to prepare for and set up your environments:

- *Prepare your site's hardware and software for The Solution Series installation*
- *Back up all installed files, saving the original environment*
- *Set up the security sign-ons and Security Officer's profile*
- *Modify the model execution scripts as needed*

2. What are the installation hardware and software requirements?

   Refer to your platform-specific installation guide or your Account Manager/Project Manager for specific software and system requirements.

3. Who does the installation?

   At your request, Cyborg's installer will install the software for your new Solution Series application(s) or your own experienced staff may perform the installation.

4. What is installed?
   When the installation is complete, the following types of files and data will be installed on your system:

- *Payroll files*
- *Online/Background files*
- *GUI files*
- *Test data*
- *Job Control Language*
- *Relational database tables for System Control Repository and Employee Database; only installed if you have a relational database environment*

   The same files are used for all installations. The installation procedures change only if you are using a relational database.

5. How many environments need to be set up?

   Cyborg recommends that you set the following environments:

- *Development*
- *Test*
- *Production*

   If you have an indexed sequential production system, you may only require two environments.

   If you operate The Solution Series on a relational database environment, we encourage you to set up an RDB test environment, in addition to the indexed sequential test

environment. This is because, once installation has been completed, RDB users must perform additional steps to create their database and populate tables.

6. What are the configuration options?

   For The Solution Series application(s) to operate, the programs need to know the location(s) of the these installed files:

- *System Control Repository*
- *Employee Database*

7. How are error messages to be handled?

   See **Setting Up Environments** *(on page 75), for a listing of error messages and corrective actions.*

8. Are there any modifications that should be made immediately following the installation?

   You will need to address the following issues soon after the installation is completed:

- *Possible environments*
- *System-wide defaults*
- *Configuration options*
- *Security sign-ons and the Security Officer Profile*
- *Backups*
- *Change control procedures*
- *Modification of execution scripts*

9. What are the post-installation security issues?

   Who will need access to The Solution Series, *what information they will require access to, and at what organizational level.*

Security Considerations

Review of Questions Answered

1. How can security be applied to special areas in The Solution Series system?

   By assigning password, user codes and defining privileges or access rights security can be applied to specific areas of The Solution Series..

2. How many levels of security should be set up?

   There are three levels of security access—complete, inquiry only, and none.

   These levels apply to the company and employee information.

3. What are the responsibilities of the Security Officer?

   Security is established and maintained by an appointed employee in your company, referred to as the Security Officer.

   The Security Officer is the person responsible for maintaining the security hierarchy.

   The Security Officer's special operator ID permits unlimited access to the system, including all security features.

Customization

Review of Questions Answered

1. What customization options are allowed by The Solution Series system?

   Customizations can be put into the following categories:

- *Navigation customization options*
- *Other user interface customization options*
- *Programming customization options (forms, reports, and so forth)*

2. What utilities does Cyborg provide to assist with the customization?

   Cyborg provides you with many utilities to help you customize your Solution Series applications.

   The following table describes the utilities.

   System Control Repository utilities

Utility	***Description***
COPY	*COPY is used to duplicate a specified System Control Repository record type to a new name. You must use the COPY prompt form to make your entries.*
DISPLY	*DISPLY is used to view a specified type of System Control Repository record online or in a printed report.*
DSP01	*DSP01 lets you view all record types in the System Control Repository except security and object code records (object P/X). DSP01 also provides a count of the total number of object code records for each module in the System Control Repository.*
EDIT	*The EDIT program is used to create and maintain the System Control Repository records.*
EXPORT	*EXPORT extracts all or selected records of a specified object (record) type from the System Control Repository. It writes these records to FILE10 that can be printed. EXPORT is a batch program that produces an output file of the selected records.*
GETSAT	*GETSAT copies the internal Screen Appearance Table for a specific form to a SAT file that can be edited using Formbuilder.*

Utility	*Description*
Maintenance In (MAINTI)	*The Maintenance Input (MAINTI) utility is used to apply maintenance to the System Control Repository during installations, updates, and moving data from test environments to production. To execute MAINTI, you must provide a control record as FILE04 and the maintenance changes in FILE05.*

The EDIT utility is a full-form editor that is used to create and maintain System Control Repository records.

3. What standard naming conventions need to be applied in customizations?

   Before you begin customization of your Solution Series system, you need to be aware of Cyborg's established standards for naming the following types of records:

- *Field names*
- *Program names*
- *Cyborg Scripting Language verb names*
- *Module codes*
- *Table codes*
- *Alternate keys*
- *Option list (codeset) names*
- *Employee segment codes*
- *Company segment codes*
- *'Other' records*
- *Error message numbers*
- *File numbers*

   The naming standards have been categorized into four groups—general, product release, consulting, and customer. These standards apply to all current and future releases.

   All Cyborg employees and customers should follow these standards; doing so will ensure a seamless implementation.

   A Naming Administrator keeps a current list of new programs, option lists, employee segments, company segments, and files requested for all Cyborg offices, subsidiaries, and agents.

   All user-defined names for fields, programs, Cyborg Scripting Language verbs, and tables must begin with the letter 'X'.

Refer to **Naming Conventions** *(on page 465) for additional information about naming conventions.*

4. What is the importance of adding an Organization Control Number to the Company Validation Table?

   This enables the P2EDIT program and the Calculate Pay (PAY-CP) form to recognize a company added online.

Organization Control Numbers are added to the Company Validation Table using an override transaction.

5. What reporting considerations should be addressed?

   There are two types of reports delivered with your Cyborg system report generator (RG) and Cyborg Scripting Language (CSL).

   RG reports are only applicable to the Payroll application. Most of the standard reports produced from the batch payroll process are batch RG reports. These can be modified using the report generator (RG) language or by contracting with Cyborg consultants.

   A number of CSL reports are delivered as part of the base system. You can modify any of these CSL reports, provided you have the proper security profile

   In addition to modifying existing reports, you can also add new CSL reports designed to your specification.

   It is recommended that any program that needs modification be copied and renamed. This ensures that Cyborg changes can be applied with a minimum of difficulty.

6. When should the system be backed up if customizations are made?

   Cyborg recommends that you back up your system prior to and following any customization. Cyborg can help you recover your data if you follow the recommendations for backing up your data.

7. What additional customization considerations exist for relational customers?

   The Solution Series is delivered with numerous relational tables.

   If you need to store additional information, Cyborg recommends that you add a new segment (table), rather than modifying the delivered relational tables.

   If you do modify one of these tables, you must make your modifications first to the System Control Repository. The changes must then be exported as input to The Solution Series CASE tool (RDBPGM0).

Data Conversion and Load

Apply the concepts

Outline a process for verifying data loaded through the use of BATCHL and batch transactions.

Review all converted forms for a sampling of employees to ensure that the data loaded through BATCHLs loaded correctly. Check that dates and amounts and the placement of data on the forms is correct.

Remember that data entered via the batch layout method is validated in the same manner as if you keyed the information directly into the forms.

Also look at the FILE03 for any records that are in error.

For data that was loaded via batch input files to update the batch master file (P20), check the Transaction Load report for data that was not accepted by the edit program (P2EDIT).

Review the Payroll Audit Trail for errors.

Validate employee wage and to-date figures using the HEDs To-Date Inquiry form (HT-SCR) and the Taxes To-Date Inquiry (JT-SCR) form.

Review of Questions Answered

1. What kind of a data load process checklist is needed?

One that considers all the implications for your organization and projects. It should consider the four phases of the data conversion and load process

Areas of concern are:

- *Data to be extracted and converted*
- *History to be loaded, such as salary history*
- *Methods of extraction and conversion*
- *The data load method to use*
- *Quality and accuracy of data in the source system(s)*
- *Data ownership and responsibility for any pre-conversion clean-up*
- *Data duplication in two or more interfaced systems and which takes precedence if there are differences*
- *Comparison of duplicated data from two or more systems before and/or during the conversion process*
- *Minimum configuration conversion requirements*
- *Movement of data between hardware platforms during the conversion process*
- *Conversion of encoded data items to match The Solution Series requirements*
- *Application of cross-field validation rules during the data extraction process and reporting of errors*
- *Two part conversion for static data and cumulative data*
- *Program specification as a joint user/IT/Cyborg system task*

2. What are the data mapping tools available?

   The Batch Layout facility produces the Batch Layout Report, which lists the entry fields found on each form in the system.

   The Batch Layout Report provides form-image records, field lengths, and any comments associated with each entry field for each selected form. You can request reports for one or several forms.

   Cyborg provides a number of tools (utilities) and reports to assist you with data mapping.

   Some of these are:

Data Mapping Tools (Utilities and Reports)	***Description***
Field Table List (FTLIST)	*A utility that lets you view the field definitions online or produce a printout in batch mode. The online display is in a scrolling format. A batch run produces a printout with headings and page numbers.*
Field Table Menu (F-MENU)	*A utility that lets you view the attributes of the data fields on file in the Field Name Table in a user-friendly, menu-driven format.*
Label to Field Cross Reference (FLABEL)	*A form that provides a cross-reference between the field labels used on a form and their data dictionary field names.*
Segment Layout Report (SRTFLD/F-SEGM)	*A report that displays each segment's layout. See following example.*

Data Mapping Tools (Utilities and Reports)	***Description***
Cross Reference Report (CROSSX/CROSSP)	*A report that cross-references all the fields and Cyborg Scripting Language verbs. See following example.*

3. What data conversion method(s) should I use and why?

   A manual conversion is practical if you have an aggressive production schedule (four months or less), 500 or fewer employees, or an adequate data entry staff available to enter the data.

   The amount of time it takes to enter data manually by a dedicated staff is dependent on the total number of employees, the amount of information to be added, and the number of staff devoted to the task.

   Automated conversion requires that you decide whether your data processing personnel or Cyborg's consulting personnel will be responsible for writing the conversion program and applying the converted data to The *Solution Series.*

   The *Solution Series can accept input data in the form of pre-formatted input records.*

4. How do data types relate to data load methods?

   Each data type must be converted using a specific conversion method.

   These methods are:

For this data type	***Use this method***
Static data	*BATCHL transactions*
Cumulative ('To date') data	*Batch transactions*

Migration to Production

Review of Questions Answered

1. What does the preparation for migration to production consist of?

   Prior to moving your original production data from The Solution Series test environment to The Solution Series production environment, you should prepare a migration project task list, including work instructions for the migration.

2. What data needs to be moved to the new production environment?

   Your original production data from the test environment moves to the new production environment.

3. What utilities and reports are available to assist you in the migration?

   The audit trail reports:

   Audit Trail Control 1-2/Employee Order (ISWAS) report before the pay extract and verify any changes made to the online system.

   This report displays, in organization and employee order, the current field value (IS) and the previous field value (WAS).

   ISWASX extracts the audit records into a file (FILE15) that is sorted and used as input to the IS/WAS Audit Trail Report (ISWASP) utility program.

   ISWASP reads the sorted audit records (FILE14) and prints a current and prior field value listing for each session.

   Changes made by the eCyborg Interactive Workforce to information in The Solution Series appear on the IS/WAS audit report generated from The Solution Series.

   On this audit report the user making the changes is always the eCyborg Interactive Workforce and not the employee who made the change.

   The ESS *IS/WAS (ISWASE) audit report was designed to provide an audit trail for the eCyborg Interactive Workforce. This report shows the change made in the system and prints the name of the employee who made the change.*

4. What are the post-migration follow-up issues and tasks?

   After a large number of online transactions, such as option list (codeset) changes have been applied to the System Control Repository and the Client Data File has been updated accordingly, the Client Data File should be rebuilt.

   Rebuilding the Client Data File reorganizes its index file to improve the application's performance. It should also be rebuilt to correct any out-of-synchronization conditions that may have occurred.

   The Solution Series is delivered with the Production Version setting switch turned OFF. Once you have migrated to production, you may want to set this switch to ON.

Your Security Officer should test all levels of The Solution Series system security for proper functionality.

Customers using both the Payroll Administration and the Human Resources Administration will need to run a complete pay run in the production environment to ensure that the migration was successful.

5. What are the relational database issues to be addressed?

   Customers using the relational version of the system should also maintain a test environment, just as customers using the non-relational version should. This means having a separate instance of the Cyborg database.

6. What issues need to be addressed by HR-only customers?

   All of the items in question 4 above but HR-only customers will not run a payroll. They need only set up a production environment and then move the System Control Repository and Employee Database into that environment.

Identifying Problems and Applying Temporary Fixes

Review of Questions Answered

1. What procedures are used to identify problems and notify Cyborg?

   When you identify a situation in which the system does not work as documented, you should communicate this to Cyborg by completing a Problem Notification (PN) form (these forms are supplied to customers by account managers and installation specialists), and submitting it to National Product Support (NPS).

   NPS reviews the problem, then submits the PN to the Problem Notification Coordinator at Cyborg.

   For tracking purposes, each PN is assigned a unique number. A technician will work with you on resolving the problem.

   If it is determined that a coding change is required, a program temporary fix (PTF) will be developed and distributed.

2. What types of temporary fixes are distributed?

   Program temporary fixes (PTFs) are resolutions to PNs. They are fixes applied temporarily until made part of the system by being included in an update bulletin, service pack, or upgrade.

   Temporary fixes fall into the following categories:

- *COBOL fixes to the CBSVx programs*
- *Cyborg Scripting Language fixes to English Language (CSL) programs*
- *FormBuilder changes*
- *COBOL fixes to the payroll programs*
- *Report Generator fixes to the Report Generator programs*
- *New versions of the GUI executable*

3. How are temporary fixes distributed?

   Temporary fixes are distributed on the Cyborg bulletin board. You should have received instructions for using the Cyborg bulletin board (CUBBS) as part of the installation process; if you have not, please contact Cyborg Systems at 312.279.6000.

4. What is an override file?

   A file used to maintain COBOL or Report Generator changes to the system.

Maintaining the Client Data File

Review of Questions Answered

1. What is the Client Data File?

   Customers using graphical user interfaces (GUI) for The Solution Series will make use of a Client Data File.

   This file contains duplicate information from the System Control Repository needed for editing and validating field data.

   Any changes made to the System Control Repository must be reflected in the Client Data File.

2. What impacts the Client Data File?

   Maintenance of the System Control Repository requires maintenance of the Client Data File.

   Much of the updating of the Client Data File will be handled automatically. Under certain circumstances, you will be required to manually maintain this file.

   All option list changes that are made using the Option List Editor immediately update the System Control Repository as well as the Client Data File being accessed by the user making the change.

3. How do you update the Client Data File?

   The Update Client Data File utility (UPDTCL) uses the Client Data File update records on the System Control Repository to update the Client Data File.

   You can execute the Update Client Data File utility in either of the following ways:

- *Sign off and back on*
- *Run the Update Client Data File utility while online*

   Every time you sign on to The Solution Series, the Update Client Data File utility automatically updates the currently active Client Data File with any changes posted to the System Control Repository since the most recent sign-on involving this specific Client Data File.

   The Update Client Data File program compares the date and time stamps on these two files and automatically synchronizes them.

4. When and how do you rebuild the Client Data File?

   You should rebuild the Client Data File when the following conditions occur:

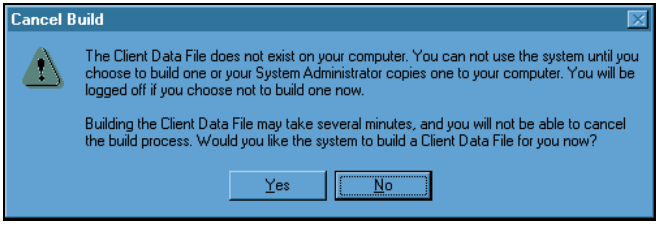
- *When an 'out-of-sync' message is encountered. After an 'out-of-sync' message appears, you must rebuild the Client Data File.*
- **After a large number of online transactions have been applied to the System Control Repository and the Client Data File has been updated.**

Rebuilding the Client Data File will reorganize its index file. By doing so, you will improve the application's performance.

To rebuild the Client Data File with the minimum amount of data, use the steps below.

- *Sign off of The Solution Series*
- *Delete the Client Data File (FILECL32) using an operating system file utility*
- *Sign on to The Solution Series*

After entering your User ID and Password, the following dialog is displayed.



- *Click Yes to rebuild the Client Data File*
  A dialog will display indicating the progress as the file is rebuilt.

To rebuild a complete Client Data File:

- *Run the Export Client File utility in batch*
- *Run the Build Client Data File utility*
- *If applicable, copy the rebuilt Client Data File into each user's working directory for The Solution Series.*

Using the Backup and Restore Utilities

Review of Questions Answered

1. What should be considered in the backup and recovery plan?

   When developing a backup and recovery plan, customers on all platforms should keep the following in mind:

- *A clean copy of the installed files, saving the original source code, should be maintained.*
- *No logging facilities are provided.*
- *No automatic backup and recovery facilities are provided.*

   Your backup and recovery plan should account for the potential of a failure. Cyborg recommends that you take a daily backup of the online files.

   At most sites, a Client Data File is maintained on each workstation. In the event of a hardware failure, a user can simply copy a current Client Data File from another user, if necessary.

   After installing The Solution Series, most clients make custom code changes. And, periodically, Cyborg distributes update bulletins.

   To be able to identify the custom code changes made at your site, you will need to have a backup of the original System Control Repository to compare to the current System Control Repository.

2. Why is it important to have a sequential backup of the system Control Repository?

   After creating a sequential backup of the System Control Repository using the Backup utility, you can use that sequential file in the restore process. The restore process creates a new random System Control Repository.

3. What facility is provided for creating a sequential backup of the System Control Repository?

   Cyborg provides a utility, BACKEM, for backing up the System Control Repository.

   If you are running version 3 on a PC platform, you must use BACKUP instead of BACKEM.

   Either utility creates a sequential backup file (FILE10) containing all records found in the System Control Repository.

4. What facility is provided for restoring from a sequential backup of the System Control Repository?

   To restore the System Control Repository from a sequential backup, you use the Restore System Control Repository (DEMO01) utility.

   This utility is run with an execution of CBSVB or CBSVBT.

5. What programs are used for backing up and restoring the Employee Database?

   To restore the System Control Repository from a sequential backup, you use the Restore System Control Repository (DEMO01) utility.

   This utility is run with an execution of CBSVB or CBSVBT.

6. What implications are there for users of the relational version of the system?

   In the relational version of The Solution Series, the System Control Repository and the Employee Database contain information required for successful relational database processing. The System Control Repository contains RFM and RFT records.

   The Employee Database contains the primary keys for accessing the data in the tables. Consequently, customers should ensure that these files and the database are backed up together.

7. What synchronization issue exists between the System Control Repository and the Employee Database?

   Object code for The Solution Series is stored on the System Control Repository as P/X records.

   To improve response time, a copy of the object code for these programs is copied to the Employee Database as ZX records.

   This occurs when a program is executed and the object code is not found on the Employee Database. Consequently, it is important that these two files have the same versions of the object code.

   When The Solution Series is running, it is the code on the Employee Database that is executed, not the code on the System Control Repository.

   If the results of processing are not as expected, determine if the code on the Employee Database is the most current.

Maintaining Cross-Reference Keys

Review of Questions Answered

1. What is a QUERY Primary Key?

   Keys provide direct QUERY access to your data within The Solution Series database.

   The QUERY Primary Keys are keys you use to direct your QUERY program to a record type.

   The QUERY Primary Keys require no maintenance and are immediately available to you.

2. What is an QUERY Alternate Key?

   The keys you use to access the employee master record in an order other than by primary key.

QUERY Alternate Keys need to be maintained on a regular basis.

3. What is a Phonetic Key?

   The keys you use to access employee data using the phonetic spelling of an employee's last name.

   The maintenance of Phonetic Keys depends on how you have entered your employee data.

4. What is an Employee ID Key?

   These keys allow you to search for employees across organizations. This is a Workflow enablement feature.

5. How do you delete and rebuild QUERY Alternate Keys?

   Using the KEYDEL program, delete the Alternate Key records from the System Control Repository

   Rebuild the Alternate Key record from the System Control Repository using the KEY-00 program.

6. How do you delete and rebuild Phonetic and Employee ID Keys?

   Indicate the type of key to build on the second panel of the Company Options form (AF-SCR).

   You can choose Phonetic and/or Employee ID. The indicated keys will be built automatically for new or transferred employees.

   Save the form

   Using DEL-PE delete Phonetic/Employee ID Keys online.

   Rebuild Phonetic/Employee ID Keys from the System Control Repository using the KEY-PE program.

7. What are the pre-defined QUERY Alternate Keys?

   The QUERY Alternate Keys pre-defined by The Solution Series are:

- *01—Social Security Number*
- *02—Employee Name*

8. What is Cyborg's recommendation for maintenance of both the QUERY Alternate Keys and Phonetic Keys?

   Cyborg recommends that you set up a schedule for maintaining the QUERY Alternate Keys and for the Phonetic Keys.

   The following is an overall maintenance summary:

Keys	***Maintenance***
Alternate Keys	*Periodically purge records and rebuild using KEYDEL and KEY-00; execute in batch using Query Control Record in job stream.*
Phonetic Keys	*For online—no maintenance; are automatically created and/or updated for employee records added to the Employee Database.* *For batch from P4CALC—rebuild keys after employee records are added to the Employee Database using the DEL-PE and KEY-PE programs.*

Running Report Options

Review of Questions Answered

1. What is the role of the system administrator in reporting?

   Typically, end users determine which reports should be printed and when they should be printed. The system administrator ensures that the end users' needs are met by doing the following:

- *Setting up control structures for running reports*
- *Defining or modifying report job streams*
- *Submitting report job streams*

2. What control structures need to be set up to administer reporting?

   The following structures are used for controlling the running of The Solutions Series reports:

- *Report Group Activities(RGMSTR)*
- *Valid reports for an organization (C12RPT) (optional)*

3. What is the flow of the batch report process?

   To initiate a report run in batch, you run three programs:

- *Report Extract*
- *Sort*
- *Report Print*

4. What facilities are available for initiating and viewing reports and batch queries online?

   SUBMIT

   This program enables you to submit batch jobs. It tells the system to run a query or a report. You can direct the output records to a print file or to the Employee Database for online viewing.

   VIEW

   This program enables you to view online the output from the Requesting Reports and Queries Online (SUBMIT) program. The reports may then be printed or deleted.

5. What are consolidated and roll up reporting?

   Consolidated reports include employees in all or selected organizations.

   Roll-up reports include all employees with a common Org value, such as CS0001 or CS0002.

Managing Working Storage

Review of Questions Answered

1. What is the recommended approach for managing working storage?

   You must complete the following tasks to manage working storage:

- *Determine if expansion of working storage is required for the online system employee and company areas.*
- *Determine if expansion of working storage is required for the Payroll Processing COBOL programs.*
- *Expand working storage for the online system employee and company areas.*
- *Expand working storage for The Solution Series Payroll Processing COBOL programs.*
- *Expand working storage for relational databases.*

   Taking a proactive approach to managing working storage areas means periodically monitoring their sizes and, if necessary, increasing them to accommodate the current data requirements of your organization.

   By doing so, you will avoid having to respond to out-of-space error messages such as 'RECORD TOO LARGE' in The Solution Series or 'EMPLOYEE AREA FULL-BYPASSED' from the Payroll Process Audit Trail report.

2. When should you check your working storage resources?

   In addition to periodic checks, you should check working storage resources in the following situations:

   Before a data load

   Before benefits enrollment

   Before implementing a new Cyborg application module

3. What are The Solution Series areas that can be expanded?

   There are three categories of areas that can be expanded:

- *Working storage areas that affect both the online system and Payroll Processing COBOL programs.*
- *Working storage areas that affect only Payroll Processing COBOL programs.*
- *Additional working storage areas that affect only relational database users.*

4. What are the Payroll Processing areas that can be expanded?

   The following table describes the areas of the Payroll Processing system that can be expanded:

Area	*Program(s)*	*Use*
RPT20	*P2EDIT/O4CALC*	*Transaction/Organization Inclusion List*
REPORT BATCH	*P4CALC*	*Loaded Report Generator Logic*
REPORT ONLINE	*O4CALC*	*5H5Z and Method Code Generators*
PAYER	*P4CALC/O4CALC*	*Company information*
TAX	*P4CALC*	*Tax Specification Data*
EMPLOYEE	*P4CALC/O4CALC*	*Employee Information*
AREAW	*P4CALC*	*WL Data*

5. How much working storage is delivered with the system?

   The system is delivered with maximized working storage areas.

   The following documents these working storage amounts/sizes:

Area	*Delivered size*
Employee (Area 2)	*24, 958*
Company (Area 4)	*32,192*

6. What areas should relational database customers consider expanding?

   Keys, individual record segments, and user-defined segments

7. Where do you find the size of working storage areas?

   The Payroll Audit Trail report shows the number of positions left in the P4CALC area.

   The program DSP02 shows the REPORT ONLINE area

8. How do you expand The Solution Series and Payroll Processing working storage areas?

   Calculate the expansion amounts by completing Step 2 of the Employee Area Expansion and the Company Area Expansion worksheets to calculate the employee area expand amount, and the company area expand amount, for The Solution Series and the Payroll Process.

   Expand the online system work areas by completing Step 3 of the Employee Area Expansion and the Company Area Expansion worksheets.

   Extract the COBOL programs to include the new AREA2-BOTH and AREA4-BOTH values.

   Expand the Payroll Process work areas by creating an override file containing the Expand transactions.

9. How do you extract COBOL source programs for The Solution Series and for Payroll Processing?

   You extract online system COBOL programs from the CBSV source file using the COBOL Extract (PULL) process. Once extracted, these programs must be compiled and linked using your standard processes.

   You extract source code for the Payroll Process COBOL from the C.P0PRGM file using the P9CNVT program. Once extracted, these programs must be compiled and linked using your standard processes.

Synchronizing Relational Tables and Indexes

Review of Questions Answered

1. How is the System Control Repository organized in the relational version and why is synchronization important?

   All option lists, certain application tables, and position control records stored in the System Control Repository are replicated in relational tables.

   Updates to the System Control Repository are reflected in the appropriate relational tables.

2. What program is used to synchronize the System Control Repository and the relational tables?

   Should a synchronization problem occur, you use the Build/Rebuild Control File Relational Tables (POPF01) program to synchronize the System Control Repository and its associated relational tables.

3. How is the Employee Database organized in the relational version and why is synchronization important?

   In the relational version of The Solution Series, company and employee data are stored in relational database tables. Each Cyborg segment equates to a relational table.

   Updates to the Employee Database must be reflected in the relational tables or the database and the tables may be out of sync.

4. What programs are available to synchronize the Employee Database, the index table, and the relational tables?

   If you need to rebuild the database indexes for the Employee Database, two programs are provided.

Program	***Description***	***Run in***
INDEXS	*Fixes all index records.* *This program can be run for all or selected organizations.*	*Batch*
FIXIDX	*Fixes a particular record index.*	*Online (recommended)* *Batch*

Performance Tuning for Relational Databases

Review of Questions Answered

1. What is the difference between static and dynamic SQL?

   DDL and DML SQL statements are embedded in application programs and called static *SQL.*

   Dynamic SQL are SQL statements created by a program.

2. When is dynamic SQL generated?

   Dynamic SQL is generated when the New Form (NEWSCR) facility is used to create a new Cyborg segment.

3. Why is static SQL more efficient than dynamic SQL?

   Static SQL statements are interpreted and converted during precompilation of the programs.

   Dynamic SQL is generally less efficient than static SQL since the interpretation and conversion of dynamic SQL statements occurs at run time, rather than during precompilation.

4. What methods are available to improve pay extract and pay merge processing run times?

   The Solution Series provides a method for improving pay extract and pay merge processing performance—selecting the data for a pay run.

   All relational database users can specify the table data that will be extracted by the Pay Extract program (PAYXTR) using Extract (EXT) records.

   You have three choices for how you run PAYXTR, as explained in the following table:

To	***Do this***
Have PAYXTR extract all table data. *Note: If you choose this option, no improvement in processing will occur.*	*Use the Extract (EXT) record as delivered.*
Have PAYXTR extract only the table data required for payroll processing.	*Delete the delivered Extract (EXT) record.*
Have PAYXTR extract only the table data required for payroll processing, plus table data you specify.	*Supply an Extract (EXT) record for each table (over and above those required for Payroll processing) whose data should be extracted by PAYXTR.*

5. If I want to improve pay extract and pay merge processing run times, can I still restrict the organizations in the run?

   The Pay Extract (PAYXTR) process has not changed. You can still extract all or selected organizations.

   If you are specifying certain organizations for processing, you must make that designation on the Selected Company Payroll Run Schedule form (PAYC12).

   Regardless of extracting all or selected organizations, the appropriate entry must be made in the pay extract control record (FILE04).

Administering The Reporting Solution

Apply the Concepts

What are the two main types of extracts and what are the differences between them?

The core system extraction copies data from the System Control Repository and Employee Database and places the copied data in the Data mart Extract File.

The majority of the data is extracted using REPORT, while the Position Administration process (PA) which is incompatible with REPORT, derives the Position Administration data.

The Labor and History extract is performed from the Batch Master File (P20) using the Report Generator routine, 7E7E (the data mart Labor and History Extract).

Review of Questions Answered

1. What are the three stages of the extraction/insertion process?

   Stage 1: Core system extraction

   Core system extraction is done using two different algorithms.

   The majority of the data is extracted using REPORT, while the Position Administration process, which is incompatible with REPORT, derives the Position Administration data.

   Stage 2: Split

   The data being output to The Data mart Extract File (FILE36) is not in an appropriate form for the bulk loaders. This file therefore needs to be split into separate files after it has been sorted.

   Stage 3: Load

   The loading process is very simple. For each table file, a bulk loader is run that uses platform-specific configuration information found in a separate format file.

2. How do the Core System and Labor and History extractions differ?

   Labor and History extraction uses payroll-related processes rather than CBSV and the System Control Repository and Employee Database to extract Solution Series data. This is because the nature and location of Labor and History records, primarily contained within static data in the Batch Master File, make it very difficult to do otherwise.

   The static nature of most Labor and History records also leads to the other main difference from core system extraction. Since a company's Labor and History records build linearly with time, and once created hardly ever change except to add new ones, a strategy to incrementally extract only the newly created records is an absolute necessity.

3. What is a data mart?

The data mart is a relational database on the server that contains tables populated by the enhanced data. The Reporting Administration *data mart consists of approximately 172 tables.*

Display Variant Form ID form (VSXSCR)

The Display Variant Form ID form displays the variant form ID for a Cyborg-delivered form and a specified country.

The message 'This country uses the generic form name' will appear if there is no variant (PI) table record for a country code.

View Variant Forms By Country form (VS2SCR)

The View Variant Forms By Country form displays all variant form IDs, by country, for a selected form. All variant form IDs and corresponding countries are displayed for the form name you request. They are listed in order by the numeric code assigned to individual countries.

Glossary of Terms

.EXE
A binary file containing a program in machine language that is ready to be executed.

.INI
A file that contains the parameters (values) used by the .exe file (program).

360-degree appraisal
Appraisals that include evaluations from an employee's managers and supervisors, peers, subordinates, and even customers, clients, and suppliers.

Absence data
Employee-level absence information that is entered on the absences forms.

Absence point
User-defined number that may be assigned for a particular absence and that can be totaled over time to determine if an employee is within the accepted number of absences for a time period.

Absence type
A classification of an employee absence, such as 'jury duty' or 'sick'. Employee absences are recorded by date and absence type.

Account timeout
The period of time that elapses before a user's account becomes invalid because of inactivity.

Accumulator id
A three-position, alphanumeric identifier for a benefits accumulator.

Acrobat
A suite of programs developed by Adobe Systems, Inc. For creating and distributing electronic documents. Programs in the suite allow you to create a portable document format (PDF) file for a document. You can then distribute the PDF file electronically to people who view the document with their freely distributed acrobat reader. People viewing a PDF file (or document) with the Acrobat Reader see the document with the exact layout intended by the author.

Action button
An action button performs an action such as saving the information you entered or telling the system you finished reviewing a page. An action button consists of an icon (or button) accompanied by underlined text (link text). For example, at various places throughout eCyborg Interactive Workforce you may see an action button displaying a check mark accompanied by the underlined text 'save changes'. You can click either the text or the button to save your changes to the page.

Activity code
Describes the clock transaction (ring) activity, such as clock start or meal end.

Activity types
With the time and attendance solution, you can set up the system so that an employee or group of employees may clock in and out for up to eight different activities: clock-in (1), break 1 start (2), break 1 end (3), meal start (4), meal end (5), break 2 start (6), break 2 end (7), and clock end (8).

Actuarial valuation
An examination of a pension plan to determine if contributions are being accumulated at a rate sufficient to pay the promised pensions.

Administration home page
The administration page that displays when a user logs on using his or her administrator user ID and password. The administration page displays links to individual administrator pages (eCyborg Interactive Workforce, Human Resources Administration, Benefits Administration, and Payroll Administration).

Administrative User ID
User ID created by an administrator with the role of eCyborg Interactive Workforce administrator. This ID

differs from the employee user ID generated for the administrator.

Aggregate tax method

Method of calculating taxes in which year-to-date income is used to project annual wages (using prorating), on which taxes are calculated. With this method, the amount of tax withheld can vary from pay period to pay period. This method is useful in preventing a salesperson from being over withheld as the result of fluctuations in commission over various pay periods. It is activated on the payroll solution by selecting aggregate/cumula tax (9) from the Withholding Method (PR09) option list on the Employee Tax Record Maintenance form. It is also referred to as cumulative tax calculation method.

Annualization

Process of calculating the annual amount of pay based on the number of pay periods and pay period amounts. Calculated by multiplying the number of pay periods in the year by the current taxable wages in the pay period.

Annualization factor

The factor that is used to multiply current pay period wages to determine annual wages. For example, a monthly pay frequency has an annualization factor of 12. The Payroll Solution typically calculates income taxes on the basis of annual wages. The annualization factor is entered by selecting an option from the Annualization (PP33) option list on the Company Pay Frequencies form for each pay frequency.

Annuitant

Someone entitled to receive or currently receiving payments from an annuity.

Annuity

A contract providing an income for a specific period of time.

Applicant

A person who is applying for a job or position in your organization. Internal applicants come from within your organization while external applicants come from outside of your organization.

Appraisal rating

A method of ranking the performance of an employee during a given period using options ranging from 1-outstanding to 5-unsatisfactory.

ASCII

American **S**tandard **C**ode for **I**nformation **I**nterchange. The basis of character sets used in almost all present-day computers; US-ASCII uses only seven bits to convey some control codes, space, numbers, most basic punctuation, and unaccented letters a-z and A-Z.

Ask Me wizard

A natural language, full-text search facility within the online help. This allows users to type in a question, the wizard interprets the question, and displays related topics.

As-of reporting

Ability to report on data for a specified date or date range.

Audit record

A snapshot of information entered on a form. Audit records are stored on the employee database and are displayed on audit reports in an is/was reporting format. Adjustments and time entries are stored as audit records and are extracted for a payroll run in which they update the employee's record.

Audit report

A report that is available after the running of a program; it lists created records as well as error messages for records that could not be created.

Audit trail

A report of changes made to your employee database, such as the Payroll Audit Trail (0101) report.

Authorized absence

Absences that are generally considered as paid time away from regularly scheduled work.

Automatic plan

A plan that has been defined with a default option and default pre- or posttax indicator (also known as core/default plan).

Average deferral percentage
Percentage used in nondiscrimination and compliance testing mandated by US law. The calculation is defined as the contribution divided by the compensation.

Average rating
A rating used for performance appraisal systems with categories weighted by relative importance, where the average score reflects the weighted scores.

Back
Takes the user back to the previous page.

Badge
Time and Attendance Administration can be set up to use two different types of badge readers. The type of badge your organization uses, is determined by your third party badge reader software. The two types of badges are magnetic badges and bar code badges.

Badge error
Occurs when a badge is used to create a clock transaction (ring) and an employee has not been assigned to the badge.

Badge number
Up to ten-character ID stored on employee badges and clock transactions (rings) that tie clock transactions (rings) to an employee on the ***Employee Database*** (on page 646).

Banner
Banner forms separate groupings on forms produced from the Federal, State/Local, and Employee Queues.

Batch
A group of transactions submitted to the batch payroll processing system. Also, a collection of time entries that corresponds to an employee group, such as department.

Batch control record
Precedes all transactions separated by group; used to identify the company to which the transactions in that group apply. By entering anticipated totals for dollars and hours on the batch control record, you may verify your totals against those accumulated by the system.

Batch layout facility
A program that produces a segment layout for loading forms via batch. This was formerly known as BATCHL.

Batch number
An alphanumeric field on the batch control record containing a user-defined value used to identify a unique group of time entries or transactions.

Batch processing
A processing method that runs in the background and requires limited intervention.

Benchmark job
A standard or point of reference for determining total job points.

Beneficiary
A person named by the participant in an insurance or pension plan to receive any benefit provided by the plan if the participant dies.

Benefits control number
A four-position, alphanumeric identifier that specifies which tables are accessed for an organization.

Benefits statement
Report that indicates the coverage and cost of each benefits plan in which an employee participates.

Big option list
A large option list that includes a search facility. This was formerly known as a big codeset.

Bridge loan
A loan made to assist a relocated employee in purchasing a new residence before the sale of their old residence is complete.

Browser
Software application used to locate and display web pages. Modern browsers give users access to graphics, text, and multimedia information, including sound and video.

Budget plan year
A twelve-month period over which a salary budget is effective.

Budget scenario
The result of creating one or more salary plans in order to see the effect of different increase policies on the budget.

Budget setting
The process of analyzing and selecting an organization's salary budget for the coming plan year.

Cafeteria plan
A specific type of flexible benefit plan that allows employees to select their benefits from a number of benefit plans. This term may be used interchangeably with flexible benefits plan.

Calculation option list
An option list that contains calculation formula. This was formerly known as a calculation codeset.

Candidate
A person who is applying for a job or position in your organization and is under consideration.

Career planning
Providing career incentives such as advancement and additional education and training for individual employees in order to meet projected organizational needs.

Carrier record
A carrier record supplies information from one application area to another application.

Case-sensitive
A program that distinguishes between uppercase (capital) and lowercase (small) letters. A case-sensitive program that expects you to enter all commands in uppercase will not respond correctly if you enter one or more characters in lowercase.

Catalog
A file (with the extension of .cat) that contains all the information necessary for Impromptu to access and retrieve information from a relational database. The catalog provides a business view of the data, as well as information about what database to access, where the database is stored, and how the tables in the catalog are joined in the datamart.

Category code
General term used to refer to the option selected from category (PP01 and PP02) option lists on the company earnings and company deductions forms. It is used to indicate the type of earning or deduction.

CE/H
Abbreviation for considered earnings/hours.

Change control facility
A facility for updating and comparing your system control repository. This was formerly known as MAINTI/MAINTO.

Check box
A standard windows control that displays a yes/no setting, either checked (yes) or unchecked (no).

Check digit
Unique identifier that is generated by the TBLCHK program and used by the system to check the table relationship records.

Checklist
A list of tasks to be performed in sequence. The checklist displays within the navigator area. Checklists link tasks and other checklists together to perform work flow functions. Users can display a checklist by selecting a checklist icon within the tasks in the navigator.

eCyborg Interactive Workforce specific—a list of tasks/pages generally displayed in a chart with hot spots (links) for the checklist items. The user clicks the link to access the page.

Checklist item
An item appearing within the navigator when a checklist is being displayed. Checklist items include tasks, dialogs and even other checklists.

Checklist item status
Defines the status of a checklist item. These can be:

- Available to perform
- Required
- Not available
- Already completed

Checklist margin
The area of the navigator that displays the checklist item status when a checklist is being displayed.

Checkmark
If in the done column of a eCyborg Interactive Workforce checklist, indicates that an item on a checklist is complete. Can also indicate OK, finished, submit, and so forth.

Class
A class is an occurrence of a course that is specific to a location and a date, that is being administered using Training Administration. For example, 'eCyborg: Using the Web Client′ on Thursday, December 21, in Chicago is a class of the course 'eCyborg: Using the Web Client'.

Class evaluation results
These are the results as entered on the evaluation forms filled out by the class participants upon completion of the class. These results are recorded on the class evaluation results form.

Client data file
File containing information replicated from the System Control Repository. Used by client workstations to improve response time, since editing can be performed locally. May be located on each client workstation or may be located on a server and be shared by multiple client workstations on the network. Formerly known as the Client Control File.

Clock in and out
Also referred to as swipe/swiping the clock. When an employee uses their badge to record an activity time, they must pass their badge through the badge reader. This action can be referred to as clocking in and out.

Clock transaction
Record containing the information needed to create time entries for payroll processing. Clock transaction (ring) information includes date, time, and badge number. A clock transaction (ring) is created when a badge is swiped through a clock.

Clock transaction warning
Occurs when a clock transaction (ring) time falls outside of an employee's schedule warning times.

Closing costs
The costs associated with the purchase of a new house.

CLP
Abbreviation for certificates, licenses, and permits.

Codeset
A list of valid code values and associated descriptions from which you may select an appropriate entry. This is now known as an option list.

Coefficient
Customer-defined value used in the formula to calculate a new salary grade midpoint value.

Combined register (2222) report
A report that provides a detailed printout of all earnings, hours, taxes, and deductions for all the payments and adjustments made on a payroll run. It is Report Generator 2222.

Command button
A standard windows control that initiates a command of sets an option (previously known as push button).

Common tax organization
A method of setting up taxation in an organization in which all necessary tax specification records are contained in a single organization. The common tax organization often handles tax specification records more efficiently, since it avoids duplication of the federal tax records and of any state or local records used by multiple companies.

Communication event
A letter or email that can be triggered automatically or manually within the system. Communication events are set up by the system administrator and usually include data from a form or record.

Compa ratio
The ratio of a given salary compared with the midpoint of the salary range. The formula is the salary divided by the midpoint.

Competency
A requisite capacity to perform a single or set of skills or activities.

Complement limit
A 'complement limit' is the maximum number of complement units that can be assigned to a position at any one time.

Complement position
A 'complement position' is a position that is included in complement control.

Complement unit
A 'complement unit' is the type of unit used to measure the value of a position, for example, headcount, fte or hours.

Compliance
Conformity in fulfilling legal requirements.

Component
The first level of functional organization on the navigator or menu, such as employee resourcing or employee development.

Component icon
An icon that denotes the current component. There are a number of components within the system. Each component appears as an icon on the navigator.

Component plan
Any plan included under the flex master plan or grouped together under a group master.

Condition
Predefined criteria that can be added to a report's filter.

Considered earnings
An employee's paid earnings that are to be accumulated, based on plan rules, for use in determining credited service or calculations of final benefits amounts.

Considered earnings/hours (CE/H) accumulators
Used only in benefits plans to accumulate the earnings and hours an employee has acquired toward eligibility for a deferred plan. Accumulators may be retained on a monthly, quarterly, or annual basis.

Considered hours paid
Actual number of hours for which an employee was paid and that are to be accumulated based on plan rules.

Considered hours worked
Actual number of hours an employee worked. These hours are to be accumulated based on plan rules for use in determining credited service for a plan participant (or for a non-participant if eligibility has been met).

Consolidated reporting
Option that enables packaged reports to be processed for all organizations (consolidated).

Customer-defined value used in the formula to calculate a new salary grade midpoint value.

Context-sensitive help
Information about an object and its current condition. It answers the question 'what is this?'

Contribution type
The type of contribution being made to a benefits plan. The system allows for the deduction and accumulation of up to five different contributions per plan: basic employee pretax, basic employee posttax, supplemental employee pretax, supplemental post-tax, and organization.

Control 1-2
A company or group of employees (now known as an organization).

Control levels
A hierarchy of values used to determine the breakdown of an organization for reporting purposes. The values are user-defined.

Control number
An alphanumeric designation assigned to a table to define the table records that will be used for each organization.

Conversion
A method for transferring data from either a manual or automated system into the system.

Co-ordinator
A coordinator is an instructional institution, organization or person who administers training courses.

Core plan
One of the plans that make up the minimum benefits in which all eligible employees are required to enroll—for

example, medical and life. Employees who fail to return enrollment forms with their benefit choices may be automatically enrolled in the core plans (also known as default plans).

Cost categories
Cost categories are classifications or divisions used to separate costs for training into broad groupings, for example, equipment or operating costs.

Cost types
Cost types are used to further define training costs. For example, the category of equipment could be further broken down into the cost type of overhead projector and monitor rental.

Costing
Projecting the future cost of a benefits plan contribution for budget purposes.

Course
A course is a separate unit of instruction in a subject being administered using the training administration solution. For example, 'eCyborg: Using the Web Client′ is a course. This may be applied to a training course provided internally or externally.

Course directory
A course directory is a list of all available courses.

CPI
Characters **p**er **i**nch

Credited service
The number of years of employment for which an employee is given credit for use in determining final benefits amounts.

Crew
A group of employees who rotate from one schedule assignment (shift) to another, following a rotation pattern.

Crew code
A unique, one-character, alphanumeric identifier of a crew.

Cross-reference keys
Provide direct query access to data within the system database.

CSL
Abbreviation for ***Cyborg Scripting Language*** (on page 643).

Cumulative data
Also called 'to-date data'. includes payroll earning, deduction, net pay, taxable wage, and tax to-date figures for employees.

Cursor
A special symbol, usually a solid rectangle or a blinking underline character, that signifies where the next character will be displayed on the screen. To type in different areas of the screen, you need to move the cursor. You can use the arrow keys or a mouse to move the cursor.

Customer-defined
Values that depend on an organization-specific definition--for example, option list.

CYB88X
An English Language root program used to set the production version switch to on or off, in addition to other automatic settings.

Cyborg Scripting Language
Cyborg's fourth-generation programming language, previously called English Language.

Data extract
Method for extracting information from The Solution Series for the purpose of subsequently loading it into eCyborg Interactive Workforce databases.

Data load
The process of moving data from one system or media to another. It encompasses data mapping, data extraction and conversion, and the actual loading of the data. Also the method of loading data extracted from The Solution Series into eCyborg Interactive Workforce databases using programming scripts.

Data mapping
The process of identifying, comparing, and matching data (field to field) to be converted from one system or media to another.

Database
A collection of information organized so that a computer program can quickly search for and select

specific pieces of data. Think of a database as an electronic filing system.

Datamart
Relational tables with a defined structure that have been designed to automatically accept full datamart extract data seamlessly.

Deduct credits by plan
A method of distributing flexible benefit credits. The total monetary value for credits is prorated based on the employee's pay frequency. Credits are given to employees as earnings added to their pay; the cost of individual employee plans are collected through payroll deductions and listed on the employee's payment stub.

Deduct credits by plan method
A method of distributing flexible benefit credits. Credits are given to employees as earnings added to their pay; the individual employee plan costs are then collected through payroll deductions.

Deduction
An amount subtracted from available net pay. Deductions can be involuntary (child support or maintenance) or voluntary (pension plans).

Deduction cycle
A predetermined schedule for taking voluntary deductions, based on the defined frequency.

De-enrollment
The process of shutting off plan benefits for an employee for reasons other than a separation activity.

Deferred compensation
Any benefit that is not immediately payable to an employee, but is instead deferred to a later date. This term refers to retirement vehicles, including all defined benefit, defined contribution, stock, and thrift/savings plan.

Deferred plan
Any benefits plan in which benefits are not immediately payable to an employee, but are deferred to some later date. This term refers to retirement vehicles, including all defined benefit, defined contribution, stock, and thrift/savings plans.

Delimiter
A character that tells the system where an item of data ends and another starts.

Dependent
An individual who relies or depends on another for his or her support.

Dependent number
A unique number in the eCyborg Interactive Workforce database that identifies an employee's spouse and his or her other dependents.

Detail page
A page in eCyborg Interactive Workforce that displays detailed information. Summary pages contain links to the detail for each record.

Dialog box
A secondary window that appears on the screen to present information or request input. Dialog boxes are generally temporary—they disappear after you enter the requested information.

Disability insurance tax
A tax required by some us states to be funded by employee-paid contributions to pay all or part of the cost of disability insurance coverage. On the Payroll Solution, us state disability insurance tax records are established as Type 4 taxes.

Disciplinary action
Action taken against an employee for violation of an organization policy or procedure.

Discretionary increase
A salary increase amount or percentage determined by a manager according to the guidelines established by the organization.

Display
Make data or images display on a computer monitor.

Display box
An area on a form in which data is displayed (formally known as an inquiry field).

Disposable income
For garnishment purposes in the us, an employee's earnings minus deductions required by state or federal law.

Distributed location
A customer location where data changes are replicated and may be distributed. A DL is identified to the system by a unique 5-position alphanumeric node ID.

Distribution
The process of passing data from a source DL to one or more target DLs.

Distribution rules
A set of parameters that determine how data will be distributed from one DL to another. These are defined at each DL by the owner using the distribution rules screens. Distribution rules are stored in tables that are not replicated (thus, they cannot be distributed).

DL
Abbreviation for ***distributed location*** (on page 645).

Double-click
Click a mouse button twice in rapid succession.

Drop-down list
A drop-down list is a view of the acceptable entry options available for a text box.

Drop-down list box
A standard windows control that displays a current setting but can be opened to display a list of choices. The user selects a choice by double clicking on the choice. The user can type into the field, and the system moves the list of choices to the last letter typed.

Dynamic SQL
Statements created by a program that must be interpreted and converted to executable sql statements at run time.

Earned income credit
A refundable amount that reduces the tax owed by certain low-income individuals in the us who meet adjusted gross income levels.

Earning
Money paid in return for work performed or services rendered. In Payroll Administration, earnings are separated by earning numbers into various categories such as regular pay, overtime pay, shift pay, bonuses, and so forth.

Earnings category
Used to categorize similar earnings. For example, all the overtime earnings can be grouped into category 01, all the shift differentials/premiums into category 06, and so forth.

EBCDIC
Extended **B**inary **C**oded **D**ecimal **I**nterchange **C**ode; binary code for alphabetic and numeric characters developed by IBM for its computers.

eCyborg Interactive Workforce Home
Button on every page that returns the user to the eCyborg Interactive Workforce Home Page.

eCyborg Interactive Workforce Home page
Home page that displays each time employees log on to eCyborg Interactive Workforce after completing the new user tasks on the New User Home page.

Effective date
Date on which an event takes place, for example, an enrollment or benefits plan change.

EIC
Abbrevation for ***earned income credit*** (on page 645).

EL
Abbreviation for English Language, now called CSL (Cyborg Scripting Language).

Electronic Performance Support system
Online tools that help users perform their job quickly and efficiently. EPSS can include online help, computer-based training (CBT), electronic manuals, wizards, and so on.

Email
Literally 'electronic mail'. This is a message that is sent to one or more people within or outside of your organization by an automated email software package.

Employee cancellation
An employee cancellation occurs when an employee is canceled from attending a training class or training program.

Employee Database
The file that contains organization and employee records. This is File02. It was formerly known as the Master File.

Employee Database record
The complete record for an employee. It may be composed of multiple physical records.

English Language
Former name of Cyborg's fourth-generation programming language, now called Cyborg Scripting Language.

Enrollment form
A customer-defined form used by employees to record their benefits elections and any associated dependent and/or beneficiary information.

Entitlement accrual
An accumulation of hours for an employee benefit, such as sick leave or vacation time, commonly known as an accrual.

Entity
Each Organization Unit, Job, Position, and Incumbent is an entity. Together they are entities.

Entry field
An area on a screen or browser page where the user can input information.

Entry form
An entry form is a form used to enter data.

Environment
The host platform and workstations where your Cyborg system resides, and any communication protocols. Also, a work space dedicated to a specific processing type. For example: development, test, and production.

EPSS
Abbreviation for ***Electronic Performance Support system*** (on page 645).

Establishment Reporting
Establishment Reporting occurs when an employer with several business locations chooses to file wage reports, broken down by location or unit, to the Social Security Administration. Each unit is identified by a four-character code, called an Establishment Number. The employer obtains approval from the SSA to use Establishment Reporting. Establishment Reporting does not apply to 1099s.

Event
The combination of a trigger (changes made to system data) and an action (the creation of an email or letter). Events always consist of these two component halves.

Excused absence
Absences from regularly scheduled work that can be considered as either paid or unpaid time off.

Extract file
A data file generated to be used by another system or application.

Federal Insurance Contributions Act
The United States Federal Insurance Contributions Act imposes two taxes on both employers and employees. Tax is withheld from an employee's wages to finance the Old-Age, Survivor's, and Disability Insurance (OASDI) social security program and the Hospital Insurance (HI) medicare program. Employers are then required to match the amounts withheld from employees. On the Payroll Solution, employee information for FICA-OASDI social security tax is entered on tax record 101 and FICA-HI Medicare tax on tax record 103.

FICA
Abbreviation for Federal Insurance Contributions Act.

Field
A data item on the database. This is usually displayed on a form as a text box.

eCyborg Interactive Workforce specific—A space allocated for a particular item of information. A tax form, for example, contains a number of fields: one for your name, one for your Social Security number, one for your income, and so on. Every field has a name (also called a field label).

Filter
Device used by report to select certain rows of information from the database, thus limiting the amount of data from the database to be viewed in the report.

Finished
Users click Finished when they have completed all information on a checklist or other *ESS* page.

Flat rate tax
A US local tax that is calculated as a standard percentage rate and that is calculated in the same way for all employees (that is, factors such as marital status do not enter into the calculation). For many such local taxes, Cyborg does not provide tax specification information on the Tax Authority File. Instead, you need to enter a Tax Specification Record for the tax on a Tax Specification Information form, indicating the tax rate in the Flat Rate text box.

Flex credits
Units granted to an employee in order to purchase benefits under a Flexible Benefits Program.

Flex Master Plan
Defines your Flexible Benefits Program and ties component plans together as a group. Employees are enrolled in the Master Plan and then select the benefit plans in which they wish to participate—for example, medical, dental, and life. Flex master plans are set up in Benefits Administration and used by eCyborg Interactive Benefits to display benefit plans to users for initial and open enrollment.

Flex plan
A benefit plan where, in addition to a core of basic benefits (if applicable), the organization/company allocates to each employee a credit for purchasing additional benefits tailored to their individual needs. Flexible benefit plans may include a flexible spending account.

Flexible Benefits Plan
A specific type of benefit plan that allows employees to select their benefits from a number of benefit plans. This term may be used interchangeably with cafeteria plan.

Flexible Benefits Program
A benefits program in which an organization may allocate to each employee a pool of credits or a monetary amount that is to be used to purchase benefits tailored to individual needs.

Flexible Spending Arrangement
A benefits welfare plan set up as an account in an employee's name that is used to reimburse the employee for certain personal expenses. In the United States, these accounts are provided by employers as a way for employees to pre-fund dependent care, legal services, or medical expenses with pretax currency.

Folder
Logical organization device for the content of a Cognos catalog.

Form
A window of information that appears within The Solution Series, including text boxes and other controls. This was formerly known as a screen.

Form area
An area of the window that contains a form.

Form Builder
A tool provided by Cyborg Systems for use with The Solution Series for designing forms.

Formal education
Education that is obtained from a college or university.

Forward
Displays the next page.

FSA
Abbreviation for Flexible Spending Arrangement.

FTE
Abbreviation for Full Time Equivalent.

FTP
File **T**ransfer **P**rotocol. A means of allowing a user on one computer to transfer files to and from another computer over a network

Full Time Equivalent
The ratio of total working time to the time that represents full time employment for a single employee. For example, an FTE of 0.5 means working half of the time that represents full time employment.

Funeral days
Absences from regularly scheduled work due to a funeral, which at the discretion of the organization, can

be considered as authorized or unauthorized, paid or unpaid time off.

Gap analysis
Comparison of a current state of being with a desired state of being. For example, you could perform a skill or competency gap analysis on individual employees or on the workforce as a whole, comparing the existing state of skills and competencies with the required state or level of skills and competencies.

Garnishment
A legal procedure authorizing a deduction from an employee's earnings to satisfy a legal requirement.

General ledger interface
A file that provides a balanced payroll journal for the period. This file contains journal entries for labor expenses, withheld deductions, income, disability, UI, and other withheld taxes, net pay, and company-paid taxes. The interface may also be produced on paper.

Go to details
Displays a new page with detailed information. Used on summary pages.

Graphical User Interface
The Solution Series provides integrated human resource and payroll functionality via the Microsoft Windows Graphical User Interface. These are the elements that display on your screen.

Grievance
A formal complaint made by an employee against the organization usually because of an unsatisfactory working condition or other work-related dispute.

Gross wages
The total of all earnings paid to an employee.

It is stored in the Total Pay (field 119 of the US Tax Authority File) field of the employee's US FICA tax record 101 (FICA-OASDI). This figure appears on the Combined Register (2222) report as Total Pay. It does not appear on US W-2 forms.

Group box
A standard Windows control that groups a set of controls.

Group plan
Defines any number of benefit plans tied together as a group. Group plans are used to define common eligibility and to cluster plans for reporting purposes.

GUI
Abbreviation for Graphical User Interface.

Handicap
Having a physical or mental disability that substantially limits activities especially in relation to employment or education.

Health and safety profile
Data on the employee record that includes information such as the employee's blood type, language, physician, emergency contacts, and any disabilities.

HED
Acronym for Hours, Earnings, and Deductions. Each earning or deduction must be established in The Solution Series with a unique identifying three-digit code. HEDs are used to record pay, hours worked, and deduction amounts and arrears for each employee.

Help
Hot spot on an eCyborg Interactive Workforce page that displays step-by-step directions for completing the page.

History record
Part of an employee's payment history; a snapshot of a check paid to an employee or an adjustment made to an HED or tax.

Holiday days
The time off that all employees are entitled to based on the decision of the organization or government regulation.

Home page
The main page of a Web site that generally serves as an index or table of contents to other documents stored as pages on the site.

HTML
Abbreviation for **HyperText Markup Language,** the authoring language used to create documents on the World Wide Web. HTML defines the structure and layout of a Web document by using a variety of tags and attributes.

Import facility
A tool delivered with The Solution Series that moves data from an external source to any organization or employee form.

Import record
A line in a spreadsheet or delimited file that contains employee or company data.

Inactive plan
A benefits plan that no longer allows employee enrollment.

Inactive tax record
An employee tax record that is no longer in effect for a given employee. Neither wages nor taxes are accumulated for the particular tax record. However, any wages and/or taxes already accumulated remain until clearing is performed. Such clearing is usually performed in preparing the Employee Database for a new year. The inactive records can be deleted at this time. The process of making a tax inactive is called deactivating.

Incumbent
An incumbent is an employee linked with a specific position. The linking of an employee with a Position is an incumbency. An employee may be linked to more than one position; in other words, an employee with multiple incumbencies. A position to which more than one employee is linked has multiple incumbents.

Information-level security
These records grant access to employee and table data via specific password records.

Initial Administrator
Only user whose user ID and password are created during installation. The initial administrator always has authority to all administrative functions: eCyborg Interactive Workforce, Human Resources Administration, Benefits Administration, and Payroll Administration, and can assign administrative roles to others by creating administrative user IDs and passwords.

Initial passwords
Password generated by eCyborg Interactive Workforce for each user ID extracted from The Solution Series. Users must create a user-defined password when they log on to eCyborg Interactive Workforce for the first time.

InitialAdmin
See Initial Administrator.

Inquiry form
A inquiry form is a form used to view data already entered.

Instructional text
Any paragraph(s) on the page that explain the function of the page or fields to the user.

Internal candidate
An employee of your organization who is applying for another job or position in your organization.

Internet
A global network connecting millions of computers.

Intranet
A network belonging to an organization, usually a corporation accessible only by the organization's members, employees, or others with authorization and used to share information.

Investment funds
Different options or accounts available to employees for allocating their contributions, usually applicable to thrift/savings plans.

IPEDS
Integrated Postsecondary Education Data System.

Job assignment
A job associated with a particular employee.

Job code
A designation for a job assignment.

Job streams
A generic reference, Job Control Language, for your operating system's command language.

Alternately: Jobstreams

Job type
A generic category that further defines a particular job.

Jury duty
This is compulsory service on court appointed juries. Employers are required by law to excuse jury duty

related absences. They are not, however, required by law to pay the employee during this time away from the job.

Label
Text that describes the information the user enters into the field.

Labor record
A record containing the hours, amounts, associated charge-to control levels, and function assigned on the employee's Payroll Home Location/Pay Allocations form.

Leave of absence
Occurs when an employee leaves the organization for a period of time, usually temporary, for personal reasons such as medical leave.

Log off
Logs the user off the system. When referring to the Log Off button, use initial caps.

Logical Employee Model
A collection of default employee information that is used to create a model. Logical Employee Model templates are used when hiring new employees to save time and ensure that critical information is established consistently and correctly. These were formally known as LMODELs.

LPI
Lines **p**er **i**nch

Mailing address
An address, other than your legal residence address, to which you have your mail sent.

Maintenance payroll run
A maintenance payroll run automatically updates organization and employee records, but it does not process time entries or generate payments, pay slips, or deposit advices. It is also used to create payment history records.

Major activity
Event that causes a change in an employee's employment status, such as a new hire, termination, or rehire.

Mandatory field
A field that requires the user to enter information before the user can exit the screen or page.

Map file
Stores the predefined relationships between an import file and a form.

Mass time entry creation
Creating time entries for a group of employees through one program execution, such as for a paid holiday.

Master File (0202) report
A Cyborg report that produces a formatted display of the data in an employee's current batch Employee Database record. This includes the wages and taxes accumulated for the employee, covering current, month-to-date, quarter-to-date, and year-to-date information for individual tax codes. It is report generator 0202.

Matrix ID
Unique identifier for each pay-for-performance matrix.

Menu
A list of choices; the choices are generally links that take the user to another screen or page.

Menu bar item
A menu that appears on the menu bar.

Message area
An area of the window that contains messages or selection lists relevant to the current form. The Message Area can be turned on or off.

Method code
One of many specific routines (usually delivered by Cyborg and identified by a two-character code) used to calculate earnings and deductions.

Midpoint
The middle of the span of currency from the minimum to the maximum of the employee salary grade.

Minimart
Relational tables you create so you can insert data from your Subset data extractions.

Monetary perquisites
A privilege or profit that an employee is entitled to that is incidental to regular wages or salary.

Moving expenses
The expenses incurred by an employee due to moving from one location to another for employment purposes.

Multiple master
A file compression technique that duplicates the current employee Permanent Master Record as many times as there are payments to that employee during one pay period. These multiple masters are detail records reflecting the amounts for the payment being made (current), and the adjusted MTD, QTD, and YTD totals. The system uses multiple master records to create history records showing the current payment figures only.

Navigation bar
In eCyborg Interactive Workforce the Navigation bar shows the name of the page you are using, for example, 'Mailing Address'. The top line of the Navigation bar shows the path you took from the Home page to reach the present page. Links on the Navigation bar let you return to the home page or log off the system.

Navigator
Left pane of the work area which forms the main method of moving through the forms. From the Navigator users select the component, process, and task in which they are interested.

Net credit method
A method allocating flex credits. An employee's cost of benefits is calculated as either a net cash earning or a net deduction from the employee's pay. The net amount is the difference, either plus or minus, between the credits allocated to the employee and the cost of his or her flex benefits choices.

New hire
Process of hiring a new employee for your organization.

New user
A user of eCyborg Interactive Workforce who has not yet completed reviewing and updating their personal information on the New User Home page.

New User Home page
Home page that displays for new users of eCyborg Interactive Workforce until they complete reviewing and updating their personal information.

Node
A Distributed Location.

Node ID
A unique 5-position identifier for a node. The naming convention is defined by the user.

Number registered
This is the number of employees registered for a training class. It is updated and displayed on the Class Schedule form.

Object
Each System Control Repository record type is assigned an object code. A single record type can have several object codes assigned to allow limited display.

Object key
A field that allows you to specify the System Control Repository record group you want to display. The value of this field is dependent on the type of information you want to display.

Obsolete plan
A benefits plan that will no longer be used.

Off cycle
An off-cycle payroll run is an additional payroll for the period just completed. An off-cycle payroll run is commonly used to process nonstandard payments, such as bonuses. It is sometimes referred to as an additional or bonus payroll run.

Online
Turned on and connected, for example, printers are on-line when they are ready to receive data from the computer. Users are considered on-line when they are connected to a computer service through a modem. That is, they are actually on the line.

Open enrollment
A period of time during which employees can enroll in or change their benefit choices for the upcoming year, generally in October or November.

Operator ID
A four-character code that identifies the user to the system.

Option
An item in the option list for a field. This was formerly known as a codeset item.

eCyborg Interactive Benefits and Benefits Administration specific—In Benefits, the plan coverage that an employee selects, such as single or family coverage.

Option button
A standard Windows control that allows you to select from a fixed set of mutually exclusive options (previously known as radio button).

Option list
An option list is a list of options that are available within a Text box. This was formerly known as a Codeset.

eCyborg Interactive Workforce specific—Options available in The Solution Series that the eCyborg Interactive Workforce administrator loads in to eCyborg Interactive Workforce. The options are then available in the drop-down list boxes in eCyborg Interactive Workforce.

Organization
A group of employees who are employed in a common structure, governed by the same set of rules or policies, and eligible for the same earnings and deductions For example, your organization may be structured into parts that represent employee groups such as active, union, retirees, applicants, and so forth.

Formerly known as a company or Control 1-2.

Organization Level 3
A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so forth, as defined by you.

Organization Level 4
A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Organization Level 5
A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Organization Level 6
A customer-defined value used to determine the breakdown of an Organization for Human Resource reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Organization Number
A six-character user-defined code that represents an organization; the highest level of the organizational structure in Payroll Administration.

Formerly known as a Control 1-2.

Organization Unit
An organization unit ('Org Unit') is a grouping of Positions within an organization (for example, Accounts Department).

Organization Validation table
A table that validates that an organization is valid and payments can be made.

Organization-specific tax setup
A method of implementing Tax Specification Records in which each organization involved in tax processing contains all the specification records required to process taxes for its employees, as opposed to a common tax organization.

Override file
A file used to maintain COBOL or Report Generator changes to the system.

Packaged reporting
A processing mode in which a job is scheduled to be run at a certain time.

Paid absence
Employee absence that will be paid by the organization. A time entry will be created for this absence.

Parallel run
The process of executing the same programs simultaneously on two separate systems to obtain the same or similar results.

Parameter form
A form that is displayed when certain programs are called from the Navigator or menus. The form facilitates entering parameters for the program.

Password
A secret series of characters, generally user defined, that enables you to access a computer, a software application, or a file. On multi-user systems, each user must enter his or her password before the computer will respond to commands.

In eCyborg Interactive Workforce, the password ensures that unauthorized users cannot access user-specific information.

Password aging
The period of time that elapses before a user-defined password expires and the user must change his or her password.

Pay allocation
A means of allocating, on a percentage basis, employee labor hours and amounts to multiple sets of control levels 3 through 6 and function to accurately reflect employees whose labor must be charged to more than one area within an organization.

Pay document
A pay slip or deposit advice with its associated pay stub.

Pay frequency
The interval at which a group of employees is paid. Examples are weekly and semimonthly. Also referred to as a payroll period.

Pay schedule
A predetermined schedule for a calendar year, identifying period-end and payment dates for each pay frequency.

Pay stub
A preprinted form, corresponding to a check or deposit advice that lists all earning, gross pay, taxes, deduction, and net pay information for an employee.

Pay-for-performance matrix
Chart representation of the variables that result from the combination of salary increase information, how much to give and when.

Payment history record
A record documenting the detail information for a payment or adjustment. Multiple payment history records may be generated for an employee, reflecting multiple adjustments or payments. These records include all earning, deduction, and tax information included in the payment or adjustment.

Payroll home location
The location where the employee is normally assigned to work and where labor distribution information is charged. An employee's home location comprises specific Payroll Levels and is always assigned Allocation Number 01 on the Payroll Home Location/Pay Allocations form. The Function field may also be used as part of a home location, depending on your specific requirements.

Payroll Level 3
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so forth, as defined by you.

Payroll Level 4
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Payroll Level 5
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Payroll Level 6
A customer-defined value used to determine the breakdown of an organization for Payroll reporting or selection purposes. This control level may be translated to a division, plant site, section, and so on, as defined by you.

Payroll period
A defined period of time for which an employer pays wages to employees.

Payroll Process Control
A series of forms used during the Payroll Process to determine the type of run (payroll run or maintenance run). Allows you to specify the pay frequencies to be paid and which reports are to be produced.

Payroll run
Updates organization and employee records, processes time entries, calculates employee pay, generates pay documents and payroll reports, including the Combined Register. It also produces a variety of special interface outputs.

PCL
Printer **C**ontrol **L**anguage

PDF
A file format that captures formatting information from a variety of desktop publishing applications, making it possible to have formatted documents appear on the screen and be printed. To view a file in PDF format, you need Adobe Acrobat Reader, a free application distributed by Adobe Systems.

Peer-group appraisal
Appraisal that uses performance evaluations completed by an individual employee's co-workers or project team members.

Pending de-enrollment segment
Plans for which an employee is enrolled, but has lost eligibility, as listed on the Pending Plan Enrollment/De-Enrollment form.

Pending eligibility segment
Plans for which an employee is eligible but not enrolled, as listed on the Pending Plan Enrollment/De-Enrollment form.

Performance appraisal
A periodic assessment and ranking of an employee's skills and accomplishments.

Performance appraisal rating
A method of ranking the performance of an employee during a given period using options ranging from 1-Outstanding to 5-Unsatisfactory.

Performance rating
A method of ranking the performance of an employee during a given period using options ranging from 1-Outstanding to 5-Unsatisfactory.

Performance-related pay
Monetary payments made to employees based on how well an employee has fulfilled job expectations.

Perquisites
Property or privileges extended to an employee.

Personal days
Authorized absences that are generally considered as paid time away from regularly scheduled work, but can be either paid or unpaid.

Phonetic keys
The keys you use to access employee data using the phonetic spelling of an employee's last name.

Pixel
The smallest rectangular area of an image on a screen.

Plan deactivation
A process that makes a plan inactive and prevents future employee enrollment.

Plan ID
A three-position, alphanumeric identifier for a plan in the system.

Plan shutdown
The process of de-enrolling an employee from all benefits plans because of a separation activity.

Plan year
The 12-month period over which a salary budget is effective.

eCyborg Interactive Workforce specific—The calendar, policy, or fiscal year in which the records of a Benefits plan are maintained.

Policy tables
Highest level tables that are used to record the generic (or master) rules for an organization or group of employees. These included your organization's rules relating to working time procedures, such as clocking in and out, docking for lateness, and overtime. Each

policy consists of a Policy Master table and one or more Policy Activities table.

Pop-up menu
A menu that appears when you use the second mouse button within the system. This menu contains context sensitive commands and options that relate to the object you have clicked on.

Portable document format
See PDF.

Position
A specific role with an organization—for example, Accounts Manager.

Alternative definition: to place an object in a specified location.

Position Administration Control Number
Two-character alphanumeric value that tells Position Administration which tables to use for a specific company.

Position complement
A 'Position complement' is the value of a Position. The organization complement is the total value of all Positions included in the complement.

Position in range
The difference between a given salary and the minimum of the salary range, divided by the difference between the range's maximum and minimum, and expressed as a percentage.

Posttax
A contribution made after taxes have been withheld from earnings.

Premium
The amount of money an organization agrees to pay an insurance company for a policy or annuity, or the amount contributed by an employee to the employer to cover the employee's portion of the total premium.

Prenotification
Informing a bank or credit union that an employee will be using direct deposit with them in the future. Cyborg recommends that you fill out the Direct Deposit Information form two pay periods in advance of the first deposit date. This ensures that a prenotification record is provided to the bank or credit union in a timely manner.

Pretax
A contribution made before taxes have been withheld from earnings.

Primary account
The account set up in eCyborg Interactive Workforce to receive an employee's pay or reimbursement checks. After deductions and deposits to additional (secondary) accounts, the remainder of pay is deposited into the primary account.

Process
A subset of a component that logically groups tasks on the Navigator or menu. For example, the process 'Maintain Employee Details' contains tasks such as 'Basic Employee Information' and 'Personal Information'.

Alternate definition: An action that brings about a result.

Process bar
The graphical representation of a process on the navigator. Each process bar is within a Component.

Program
A program is a series of classes being administered using Training Administration. For example, 'The Cyborg Training Schedule for January-June 1996' may be a program consisting of eight different classes.

Alternative definition: a form or other program within the system, accessed directly from the Command dialog box. For example, form EF-SCR is a program.

Protected amount
The amount of disposable income protected from garnishment in the US This amount may vary from state to state.

Prototype HED
An HED defined on a benefits form for use in recording employee/organization contributions when an employee is enrolled in a benefits plan. This allows the setup and maintenance of payroll deductions using Benefits Administration.

Provider
A provider is an instructional institution, organization, or person who is available to teach training courses.

Push button
A button on the interface which appears depressed when clicked on (now known as command button).

Quartile
Points that represent the division of a salary grade range into four equal parts.

Query alternate keys
The keys you use to access the employee master record in an order other than by primary key.

Query primary keys
The keys you use to direct your QUERY program to a record type.

Quick Hire
The process of hiring an employee by entering one two-panel form with the required data elements rather than entering a series of forms.

Radio button
A button on a form that selects an option, the radio buttons that make a field are mutually exclusive (now known as an option button).

Recall
Return a laid-off employee to active status, usually with no affect to benefits.

Reciprocal taxation
Reciprocal tax withholding refers to agreements made between US states and (or) localities regarding income tax calculation and reporting for compensation paid to an employee who lives in one state or locality and works in another.

Record
A complete set of fields, such as the fields that make up a tax form or a name and address record.

Alternate definition: To set down for preservation in writing or other permanent form.

Recruitment
Process of finding and hiring new employees who meet the needs of your organization.

Recycle File
P05IN; A file that contains employee data and pay document information required for payment reconciliation. It also contains time entries to be processed and paid at a later date. This file is used to pass data to the next payroll or maintenance run.

Registration
Registration is the act of enrolling an employee in a class.

Registration number
A three-digit registration number is assigned to employees for tracking purposes when they register for a training class. This enables the order in which the employees registered to be viewed.

Rehire
The process of hiring a former employee of your organization. Typically, a break in service is incurred and benefits must start over (usually requiring a new adjusted seniority date if used in benefits tracking).

Reimbursement account
The account into which employee's travel and other expense type reimbursement checks are directly deposited.

Reinstatement
The process of returning a former employee to active status within a certain time period (such as 90 days), thus qualifying the employee to have certain benefits restored to the original hire date.

Reject time
The point at which an error condition will occur. An error condition must be manually corrected/approved and approved before a time entry can be generated by the system.

Relocation
The process of moving an employee from one organization to another geographic location, whether the move be domestic or international. This process also applies to applicants who are being relocated as part of the hire process.

Remaining net pay
The 'bucket' of money that is left after all employee deductions and taxes have been taken from the employee's gross pay. This 'bucket' of money can then be used for multiple deposits if the enterprise sets up multiple deposit HEDs.

Replication
The automatic process of writing changes made in the Employee Database and option lists and tables in the System Control Repository to the Replication Holding File (FILE08).

Replication Application
English Language program (DSAPLY) that reads records from the Replication Packet File (FILE20) produced by the Replication Reception program (DSRECV) and updates the System Control Repository and Employee Database accordingly.

Replication Distribution
Two COBOL programs that work together to distribute and receive updates. The Replication Distribution Program (DSTRIB reads either the Replication Holding File (FILE08) or a Replication Packet File (FILE20), selects data applicable to a specific DL and writes all necessary data to a new output-only Replication Packet File (FILE21). The resulting FILE21 will be processed on the remote DL via the DSRECV Replication Reception program.

Replication Holding File
FILE08. This file contains additions, changes, and deletions to the System Control and the Employee Database. Data is distributed from and written to this file, based on the data distribution rules configured for the target DL by the source DL.

Replication Packet File
(FILE21/20). This file contains data changes and is created specifically to update a target DL. This information may include Company/Employee data, tables and option lists, and time entry and adjustment records.

Report
The term report refers to a report produced on paper.

Report Generator
A program that produces the batch payroll and the batch payroll reports.

Report Group
A series of packaged reports that are created using the Report Group Activities form and are run together.

Report Group Scheduler
This is the program that allows you to schedule reports. This was formerly known as the Report Scheduler.

Report parameters
Specific guidelines for determining the information to be processed by a given report or program.

Requisition
A formal request to fill a vacancy or vacancies.

Requisition candidate
A candidate for a vacancy represented on a requisition.

Requisition limit
A total unit value of a requisition.

Requisition unit
The value of a requisition expressed as an FTE, hours, salary or headcount.

Retirement
Occurs when an employee retires from the organization.

Return
The activity of an employee returning as an employee to active status, usually following a leave of absence.

Alternative definition: key on keyboard used to perform a carriage return, can also be known as Enter.

Review process
A method used by an organization to evaluate an employee's salary or performance in a standard, timely manner.

Roll-up reporting
Option that enables packaged reports to be processed within organizations (roll-up).

Rotation pattern
A way of describing the working pattern for a group of employees (crew) who regularly work different shifts.

A crew is a group of employees who together regularly work the same schedules according to a rotation pattern.

Safety standards
Legally-mandated workplace safety standards.

Salary budget record
Defines, for each employee, the budgeted increase amount, percentage, and effective date for a specific salary plan year, and the prorated effect of this increase on the budget in terms of amounts and percentages for each employee.

Salary grade
A range of salary amounts associated with a particular job.

Salary grade range
A range of salary amounts associated with the salary grade for a particular job.

Salary plan
A set of rules or guidelines used to budget for salary increases for the coming year.

Salary plan year
A 12-month period over which a salary plan is effective.

Salary range
The span of salary amounts from the minimum to the maximum of the employee salary grade.

Salary review
A periodic evaluation of an employee's compensation.

Salary review authorization form
Hard copy format of the employee criteria necessary to review and approve proposed salary increases.

SAT file
The Solution Series form appearance table. Simple text file that reflects the form's layout.

Save Changes
Saves the page (form) the user completed. (When you click 'Save Changes', eCyborg Interactive Workforce saves the information on the page whether or not the user made changes.)

Schedule Activities table
Identifies activity types for each point in a work day where the process of clocking in and out should be dealt with. Each Schedule activity also contains time parameters that will be used to calculate whether an employee will be docked or credited time.

Schedule assignments
Also referred to as a schedule. This term refers to the details of the Schedule Master tables to which an employee is assigned. These details include the date the assignment took place, the Schedule Number and Sub-Schedule Number, and (if applicable), the crew to which the employee is assigned.

Schedule error
Occurs when a clock transaction (ring) time falls outside of an employee's schedule reject times.

Schedule Master table
Used to set up your organization's Time and attendance rules (such as HEDs and the minimum number of hours an employee must work before a meal deduction is made). A Schedule Master table is associated with a Calendar Routine, earnings Code, and Shift Premium table by entering the appropriate identifier.

Schedule number
A unique three-character alphanumeric identifier used to partially identify a schedule table.

Screen
Now known as a form.

Scroll bar
When information on a page takes up more than one screen of your monitor, the system adds scroll bars to the right side of the screen. On the scroll bar:

- Click the up arrow to move line by line to the top of the page
- Click the down arrow to move line by line to move to the bottom of the page
- Click the double arrows to move several lines up or down the page

Click and drag the bar in the scroll area to manually move up or down the page.

Search argument
The value from an employee's master record used to search benefits tables to apply plan rules to specific groups of employees.

Search type
The definition of a field from an employee's master record to use as the search argument.

Secondary account(s)
Additional account or accounts at financial institutions that employees set up in eCyborg Interactive Workforce receive a portion of their pay. A primary account must be defined before an employee can set up additional accounts.

Security Officer
The assigned employee who is responsible for the setting up and monitoring of the security your Cyborg system.

Self-adjusting taxes
Taxes for which the system automatically recalculates the tax on a cumulative year-to-date basis on each payroll run.

In the U. S. these include FICA taxes: Social Security (tax record 101) and Medicare (tax record 103). The purpose of this calculation is to avoid any differences (of pennies) in FICA tax paid versus FICA tax due at year-end due to rounding on a pay period basis. In addition, certain state disability taxes and employee-paid state unemployment insurance taxes also self-adjust.

Sequential Master File
P20IN; The batch processing version of the Employee Database. This file contains organization and employee data, tax tables, and the object code for programs.

Service interruption
A period of time during which an employee did not maintain an active working status in the organization.

Service method
A calculation option list that determines the method for calculating credited service.

Session
When users log onto a software application, they begin a session. When they log off, they end the session.

Alternate definition: The period of time during which a class is held.

Shift
An employee schedule assignment for a given day. For a rotation pattern, this is a Sub-Schedule Number.

Alternative definition: key on keyboard, typically used to describe key combinations for a shortcut key.

Shift premium
A premium (or differential) added to an employee's regular earnings, overtime earnings, or both. It is represented by a shift code or HED Number.

Shortcut menu
A menu that appears when you right-click within The Solution Series 4. This menu contains context-sensitive commands and options that relate to the object (form, Navigator, and so on) on which you have clicked.

Sick days
The time off that an employee is allowed to take due to illness as a result of an employment contract or organizational policy.

Solution View
An online utility that provides the tools for creating new forms, fields, and report programs without the direct use of Cyborg Scripting Language.

Source DL
The node that owns the data being distributed. Depending on the rules established, the same DL can alternate from source to target.

Special assessment
Extraordinary or temporary taxes, such as additional employer-paid or employee-paid contributions to state unemployment programs or to mandatory health insurance programs.

Spinbox
A control on the interface composed of a text box and increment and decrement buttons that allow you to adjust a value from a limited range of possible values.

Spreadsheet application
Software for recording ledger entries, creating worksheets, graphing data, and other accounting functions.

Standalone Time and Attendance
Customers who are using the Cyborg's Time and Attendance Administration but not the Cyborg's Payroll Administration.

Static data
Includes organization and employee information, such as name and salary.

Static SQL
Data Definition Language (DDL) and Data Manipulation Language (DML) statements embedded in application programs.

Status bar
The bar that appears at the bottom of The Solution Series window. The Status Bar displays useful information, such as your current session number, the currently displayed organization and employee, and so forth.

Statutory employee
Any of the four categories of workers who are independent contractors under common law and are treated by statute as employees. These include:
(1) a driver who distributes beverages (other than milk) or meat, vegetables, fruits, or bakery products; or who picks up or delivers laundry or dry cleaning, if the driver is your agent or is paid by commission.
(2) certain types of full-time insurance sales reps
(3) an individual who works at home on materials supplied by you that must be returned to you
(4) certain full-time traveling or city salespeople.

Social Security and Medicare (FICA) taxes may or may not be withheld. Income taxes are not withheld from a statutory employee. A statutory employee will receive a W-2 with the 'Statutory Employee' box checked.

Sub-schedule number
A two-digit numeric text box used to further identify a schedule table.

Succession planning
Finding and developing employees for placement into identified key positions that are expected to become vacant sometime in the future.

Summary page
To help you see information at a glance, eCyborg Interactive Workforce uses summary pages. The summary page displays a short view of detailed information. For example, all your emergency contacts appear on a summary page. You delete the contact or proceed to the detail for the contact from the summary page.

Summary plan
A customer-owned description of a benefits plan.

Supplemental wages
Wages that are separate from regular earnings may be classified as supplemental wages and taxed using the default method. The default method means using a set percentage specified by the tax authority. Examples of such earnings are bonuses and commissions.

Surplus
A 'surplus' is an exceeded complement position.

System administrator
An individual responsible for maintaining a multi-user computer system, including a local-area network (LAN). Typical duties include:

- Adding and configuring new workstations
- Setting up user accounts
- Installing system-wide software
- Performing procedures to prevent the spread of viruses
- Allocating mass storage space

System Control Repository
This is the file that contains system definitions for The Solution Series, (FILE01).This was formerly known as the Control File.

System Generator
A type of Report Generator that performs system functions, such as defining data elements and system messages.

Table
Contains an organization's rules and policies and controls what actions take place at the employee level.

Alternative definition: means of displaying information in columns and rows.

Table Definition Record
Table containing data about the Position Administration table records, including the location of keys to associated tables.

Target DL
The node that receives the data being distributed. Depending on the rules established, the same DL can alternate from target to source.

Task
The lowest level of organization on the Navigator or menu, generally equivalent to a form. checklist, or dialog.

Task icon
An icon denoting a task. Task icons describe the type of task, including Forms, Checklists, Dialogs and others.

Tax authority
A government agency to which an employer and employee has statutory tax obligations. The tax authorities for which you handle taxes exist at the federal, state/province, and local levels.

Tax Authority File
A Cyborg-supplied file that contains all the tax-specific information needed to calculate taxes for tax authorities. This includes wage-bracket tables for different marital statuses and information relating to allowances and standard deductions. The sources for the contents of this file are tax specifications published by the various tax authorities.

Tax code
The three-character to seven-character Cyborg-supplied reference code that identifies a tax and that serves as the link between the Tax Specification Record and the employee tax record.

Tax Maintenance File
One of the two Cyborg-supplied tax files. A Tax Maintenance File is a file issued by Cyborg in conjunction with a Tax Update Bulletin (TUB). It contains all the tax specifications that are being updated in the bulletin, in the form of tax specification transactions. These transactions are typically used as input to the batch maintenance run in which tax updates are applied.

Tax specification
Each tax authority publishes tax specification information that specifies how each tax must be administered. This information specifies how employers should calculate taxes and how taxes should be withheld from employees (if withholding applies). The tax specifications can be in the form of tax formulas and (or) tax tables.

Tax Specification record
A record on your Employee Database that contains the tax specifications for a tax. The record contains all the information, as obtained from the governmental authority, needed to calculate tax amounts for the tax. The record may contain more than one tax; for example, US state Tax Specification records contain information for both state income tax and state unemployment insurance. Once a Tax Specification record is activated, tax specification information from the Cyborg-supplied tax files can be loaded onto the record on your Employee Database.

Tax table
A set of information required to calculate a tax, for a specific set of employee parameters. Tax tables are stored and maintained in Tax Specification records. A table typically includes wage and bracket information and data relating to allowances, such as personal exemptions and to standard deductions. There can be several tables relating to marital and resident status in a given Tax Specification record.

Tax type
This term refers to various categories of taxes, for example, income, National Insurance, unemployment, disability, Social Security (FICA-OASDI), and Medicare (FICA-HI).

Taxability
The term refers to whether an hours, earnings, and deductions amount is to be included in taxable wages to be accumulated for a specific tax. If the hours, earnings, and deductions amount is excludable, then the amount is not included in taxable wages. If the hours, earnings, and deductions amount is taxable, then the amount is included in taxable wages. The term fully excludable or fully taxable implies that more than one type of tax is being referenced, for example, state income tax and state unemployment insurance in the US.

Taxable wage base
The taxable wage base represents the maximum amount of an employee's wages on which tax is levied and after which there is no liability. A wage base in the US

typically is in effect for FICA, unemployment taxes, and disability.

Tax-related Regulatory Bulletin

A TUB contains the updates to tax specifications supplied by Cyborg, consisting of a bulletin document, a tax file that contains the updated tax specifications, and a printed listing of tax specification transactions with the updates.

TDR

Table Definition Record.

Template

A basis from which to create a custom item. For example, you can use an existing Cyborg report as a template for your custom report.

Temporary password

A set of alphanumeric characters used with a user ID to limit access to a software application. The system requires that users replace their temporary password with a user-defined password within a certain number of days.

Termination

The activity of an employee no longer being employed by the organization.

Test environment

A separate organization or system partition used only for testing.

Text box

A control on the interface in which text can be entered and edited (formerly known as a field).

Text qualifier

The character surrounding an item between delimiters. All values between the qualifier are data items and are not scanned for a delimiter. This allows a delimiter character, such as a comma, to be a valid data item. Example:

"item 1","item 2","item 3, 4 and 5"

This string contains three data items:

Item 1

Item 2

Item 3, 4 and 5

Although the third item contains a comma, it is ignored as a delimiter because it is between the text qualifier of speech/quotation marks (").

Time entry

The form in which you enter the hours worked for an employee. This was formerly known as a Time Card.

Time entry extract file

A file of time entries external to the Time and Attendance Solution that is used to feed to payroll.

Time entry validation

The Time Entry Validation/Creation program identifies and assigns an activity, for example Clock In (1), to each clock transaction (ring) when performing the validation function. Each clock transaction must be assigned to an activity, in order for time entry hours to be calculated for an employee, for a particular shift. This program validates clock transactions (rings) and generates time entries.

Timeout

The period of time that elapses before a user's eCyborg Interactive Workforce account becomes invalid because of inactivity.

ToolTip

A standard Windows control that provides a small pop-up window that provides descriptive text, such as a label, for a control or graphic object.

Top-down appraisal

Appraisal made by a supervisor or manager of an employee's capabilities. Such an appraisal is generally based on the supervisor's or manager's day-to-day observation of an employee's work performance and will usually include an appraisal interview with the employee.

Trainer

Trainers are set up on the Provider Index Form. They are instructional institutions, organizations or persons who are available to teach a training class.

Trainer code

The trainer code is a four-character value that represents a trainer. This value resides in Option List TR38.

Training area
The training area is recorded on the Class Schedule Form. It is typically defined as the section of the organization to which the training applies, such as manufacturing.

Training class results
These are the class details and absence information recorded on the Process Class Results form. Details recorded include the objectives met when taking a training class.

Training class status
The status value is updated and displayed on the Class Schedule Form. It tracks whether the training class is canceled, full or available.

Training course code
The training course code is a six-character value that represents a training course. This value resides in Option List TR33 and is associated with a course title.

Training plan
A plan of training courses that an employee will attend in the future to achieve the necessary skills to perform a job.

Training reason
The reason for training is used to identify why a training request has been made. For example, the purpose of the training to act as a refresher, to acquire new skills, and so forth.

Training request
A training request is a request for an employee to attend a specific course or class. A formal request for training is not essential. This step could be omitted and the employee could be registered directly in the course of his or her choice.

Transfer
Process of moving an employee from one organization to another organization, such as moving an applicant from the applicant organization to the active employee organization.

Alternative definition: to move data or files from one computer to another

Trend analysis
Reporting or statistics that indicate the rate of change in costs and other elements of a benefits plan.

Trigger
A set of conditions that must occur for an email or letter communication event to start. This can involve the creation, deletion, or modification of forms or checklists within the system.

Tuition reimbursement
Remuneration made to employees for tuition expenses.

Type of training request
The type of training request indicated whether the employee was required to attend the training or whether he or she asked to attend the training.

Unauthorized absence
Absences that are generally not considered paid time away from regularly scheduled work.

Underlined text
In browser applications, text that provides a link to another screen or page.

Unemployment insurance tax
A tax required by some US states to be funded by employee-paid contributions to pay all or part of the cost of unemployment insurance coverage. On the Payroll Solution, state unemployment insurance tax records are established as Type 2 taxes.

Unpaid absence
Employee absence that will not be paid by the organization. A time entry will not be created for this absence.

Upward appraisal
Appraisal that calls for evaluations by those who work under the direction of the employee being evaluated.

URL
Acronym for uniform resource locator. A standard way of specifying the location of an object, typically a web page, on the Internet. URLs are the form of address used on the World-Wide Web. They are used in HTML documents to specify the target of a hyperlink which is often another HTML document (possibly stored on another computer).

User class
Cognos Impromptu assigns security according to configured user profiles. These security profiles are configured by your Impromptu administrator.

User code
A set of characters (up to eighteen alphanumeric characters) that, along with the password, identify the user to the system as a valid user user when they log on.

The user code is case-sensitive (upper case, lower case) and must be entered using the correct case.

User defined password
A set of alphanumeric characters created by users that allows them to view and update information in a software application.

User ID
A set of characters that identify you to the software application. The application contains a list of authorized users by user ID. When you attempt to log on, the system checks the list of authorized users to determine whether you have authority to use the application.

User profile
Used for security purposes to determine what you can and cannot do while you are using the system, and which parts of the system you can access. A user profile is created and maintained for you by a Security Officer. Each user of the system will have a user profile.

Vacancy
An open position that needs to be filled, or an unfilled complement position

Vacation days
The time off that an employee is entitled to as a result of an employment contract or due to length of service.

Validation
The process where the Time Entry Validation program identifies and assigns an activity to a clock transaction (ring) when performing the validation function.

Variant forms
Method of displaying country-specific variation of Cyborg-delivered forms.

Waive
The act of choosing not to enroll in an optional benefits plan.

Warning time
Used to set a period of time after which an employee will appear on the exception report for a particular activity. A Warning condition will allow the creation of a time entry. A Reject condition will not. This is part of the Time and Attendance Administration.

Welfare benefit plan group
First level of the logical organization of welfare benefit plans in eCyborg Interactive Workforce.

Welfare benefit plan subgroup
Second level of the logical organization of welfare benefit plans in eCyborg Interactive Workforce.

Welfare plan
Any insurance or other benefit plan that provides immediate benefits to a participant—for example, medical insurance.

What-if mode
Method for processing a report that allows viewing of information without updating of employee records.

Window
A standard Windows object that displays information. A window is a separately controllable area of the form that typically has a rectangular border.

Wizard
A form if user assistance that automates a task through a dialog with the user.

Work area
The Solution Series screen. It includes the menus, toolbars, Navigator, forms area, message area, and status bar.

Work instructions
Specific tasks to be completed during the migration of data and files from test to production.

Work restrictions
Restrictions that prevent an employee from participating in specific workplace functions.

Worker's compensation
Legislation in the US that provides compensation to employees who suffer work-related injuries.

Workforce competency
The capacity of the overall workforce to perform required functions and sets of activities.

XHTML
Extensible HyperText Markup Language, used by the help pages for eCyborg.

Year End Master File
P20OUT file from the final payroll run of the year

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Using the Cyborg Print Utility

2.0

CYBORG SYSTEMS

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Contents

PART 1

Introduction

In This Section

CHAPTER 1

About This Manual

How to use this manual

This manual has been designed as a reference manual. It has been written to facilitate self-study.

Table of contents

The manual has been carefully designed for ease of use. All our manuals are written to be task oriented to help you complete your business tasks using our software.

The table of contents lists all the tasks and their respective chapters.

Glossary of Terms

A Glossary of Terms section is provided to explain terms used in the documentation.

Index

An index is provided to help you locate specific information.

This document was designed to reduce your need for an index. You should find the table of contents sufficient.

Introductory chapters

It is important that you read the introductory chapters first. Chapter 1 ensures you get the most out of the information we have provided. Chapter 2 provides the detailed directions for using the Cyborg Print Utility.

Instructional chapters

All chapters, other than the introductory chapters, are instructional chapters. They contain detailed instructions on how to complete the business tasks. Each instructional chapter has the following distinct sections:

Key Concepts

Always read the conceptual information first. This will help you understand why you have to perform certain tasks. It will also help you make decisions about your options and help you understand the importance of performing certain tasks.

Exercises to help you apply the concept to a business task are included at the end of most concepts.

Detailed Directions

When you are ready to perform a task, review the Detailed Directions, which provide guidance, as well as the specific steps, to complete a task.

Guided Practice

The Guided Practice within the Detailed Directions offers you an opportunity to practice a task with step-by-step instructions. It takes you through the various steps, providing detailed examples so you can gain a comfort level with the task. Guided Practice is easy to locate.

For practice, type 'ACME Manufacturing'.

Note: To successfully follow the Guided Practice, you must have completed all the previous Guided Practice exercises in the manual.

All users who complete the Guided Practice must either have their own test data.

Review of Questions Answered

To be certain that you have understood all of the information in a chapter, complete the review questions provided at the end of a chapter. The answers to these questions can be found in the appendices.

Conventions used in this manual

The underlying page layout and design of this manual are meant to be as intuitive as possible for you. Our intent is to make it easy to navigate through the manual and concentrate on learning and doing.

Cross-references

Wherever appropriate, we provide cross-references to help you find additional information or further discussion of a specific topic.

☞ *Refer to a cross-reference to find more detail or more discussion on a given topic.*

Notes

Whenever there is important information you should be aware of, we provide a note.

Note: You will find tips or quick techniques covered in Notes.

How to get additional help

If you can not find the answers to your questions in this manual, contact Cyborg Customer Support, who will be able to answer specific questions and give you general advice on training.

Please visit our web site ***www.Cyborg.com*** (see "Cyborg Home - http://www.Cyborg.com") for the latest schedule of available courses and course descriptions.

Suggestions and feedback

We value your feedback on our performance support materials. Please forward any comments on this manual to Customer Support.

PART 2

Using the Print Utility

In This Section

CHAPTER 2

Using the Print Utility

In This Chapter

Introduction

This document will provide a description of the Cyborg Print Utility (CYBPRUTL) and instructions for its use.

The Cyborg Print Utility is meant to facilitate the printing of year-end forms (W2s and 1099s, for example) and year-end and quarterly reports, although you may find it useful when printing various other reports such as the output from payruns, maintenance runs, or CBSV report runs.

The utility consists of an executable program (.exe) and an '.ini' file that should be installed in the same directory as the help files (.hlp and .cnt).

The utility will run on any Microsoft Windows platform (Windows 95 or higher).

If you wish to run the utility for files created on a platform other than Windows or Windows-NT, you must first use the File Transfer Protocol (FTP) to move the output files in ASCII mode to the PC platform on which you will run CYBPRUTL.

☞ *Refer to Detailed Directions for more information about preparing to FTP files created on an AS400.*

The Cyborg Print Utility is delivered to make it easier to print reports in that you no longer need to rely on Printer Control Language (PCL) to print.

Questions answered

1. What is the Cyborg Print Utility?
2. On which computers can I use the utility?
3. How can I review magnetic media using the Cyborg Print Utility?

Print Utility options

Note: The Cyborg Print Utility program can be activated by using a desktop shortcut icon on your PC. Please contact your technical support staff if you need assistance in creating the shortcut.

After you run the year-end or quarterly reports and have created your output files, and, if necessary, used FTP to transfer them to a PC, you can use the Cyborg Print Utility to:

1. Select a print profile
2. Change the Settings of a print profile or create a new print profile
3. Open and print forms or reports using the current print profile
4. Modify printer settings
5. Do a print preview of your form or report
6. Link to Notepad
7. Reformat a tape or diskette file with carriage returns/line feeds so that you can review the tape or diskette file contents using an editor such as WordPad or Notepad
8. Copy a tape to diskette

Note: Transferring (via FTP) of the output files in ASCII mode is required if the files are created on a non-PC platform. In the case of IBM EBCDIC platforms, the conversion of the IBM carriage control to ASCII carriage control is done by the Print Utility.

For VAX users: When transferring files via FTP to a PC, the carriage returns/line feeds (CR/LF) will be lost.

Detailed Directions

Note: *Prior to using FTP to move files from an AS400 to the PC for **printing**, you must create a physical database file with a record length of 133. Copy the desired output spool file to the physical file and set the Control Character to 'FCFC'.*

Note: *Prior to using FTP to move files from an O/S 390 to a PC for **printing**, modify your JCL to send the job output to disk rather than spool files; then you can FTP directly to the PC.*

The Cyborg Print Utility has both a menu system and a toolbar which has icons that correspond to the menu items.

A description of an icon can be displayed by moving the cursor over the icon and pausing. The icon description is also shown at the lower left hand portion of the screen when the cursor is on the icon.

The toolbar also has three icons that are grayed out or unavailable when you first start the Print Utility. They are used in a special task and will be described in the documentation where appropriate.

The tasks below use these various means of accessing Print Utility activities.

Tasks

Setting up a printer

1. Activate the Print Utility

Click on the desktop shortcut icon to start the Print Utility.

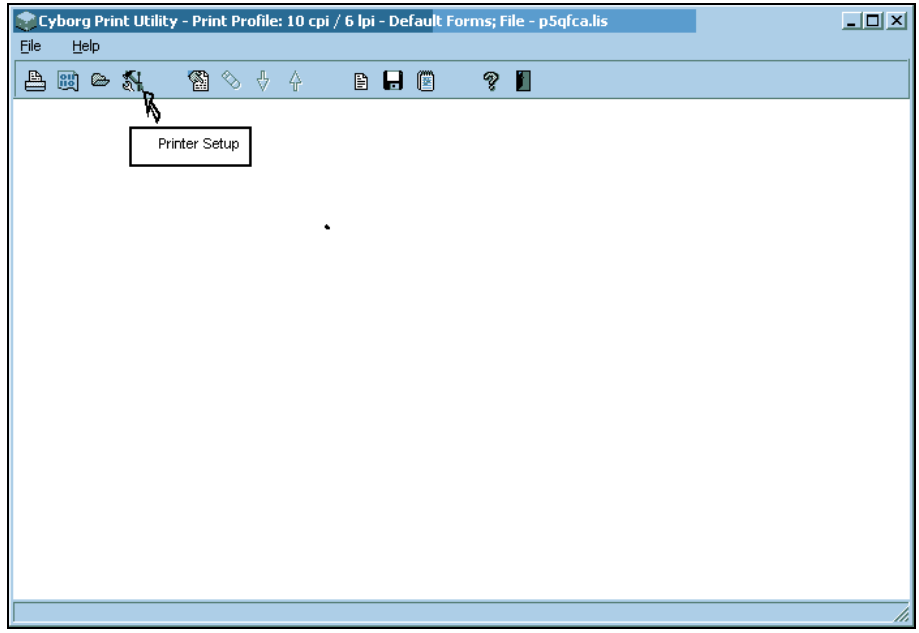
You can also execute the CYBPRUTL.EXE command:

- from a DOS prompt (once you have moved to the directory containing the .EXE file) or
- by double clicking on CYBPRUTL.EXE in the directory/file folder from within Windows Explorer.

For practice, start the Print Utility using the method you prefer.

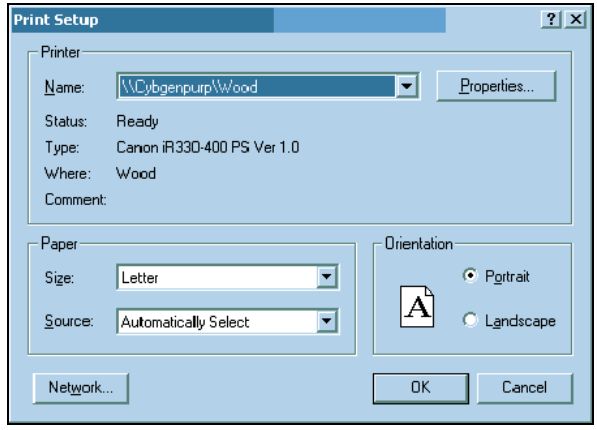
2. Select the File option or the print setup icon

For practice, click on the printer setup icon.



3. Select a printer

The Print Setup form appears next allowing you to direct your print job to a specific printer.



Typically, this is the form on which you can select the type of paper, paper tray, paper orientation, and two-sided printing.

If you have the option to select printer resolution, choose 600.

For practice, explore the various options you have available for setting up the printer you will use, then click Cancel when finished.

Printing forms/reports

To print forms and reports on an impact or laser printer, follow these steps:

1. Activate the Print Utility

Click on the desktop shortcut icon to start the Print Utility.

You can also execute the CYBPRUTL.EXE command:

- from a DOS prompt (once you have moved to the directory containing the .EXE file) or
- by double clicking on CYBPRUTL.EXE in the directory/file folder from within Windows Explorer.

For practice, execute the Print Utility.

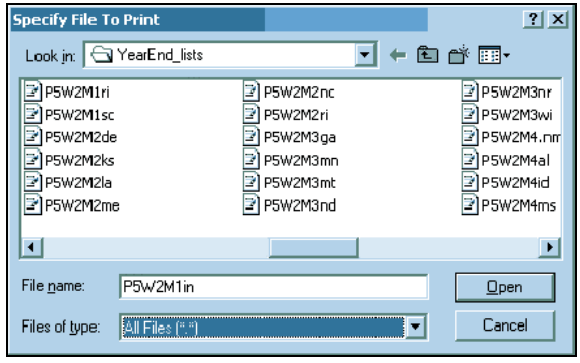
2. Select the File option or the File icon

For practice, click on File.

3. Select Print Forms/Report

For practice, select Print Forms/Report.

After you click on Print Forms/Report, a window 'Specify File to Print' will open a listing of reports to print.



Note: *It may be necessary to browse to the directory in which your files are located the first time you use the Print Utility. The program will 'remember' the last file opened during subsequent use.*

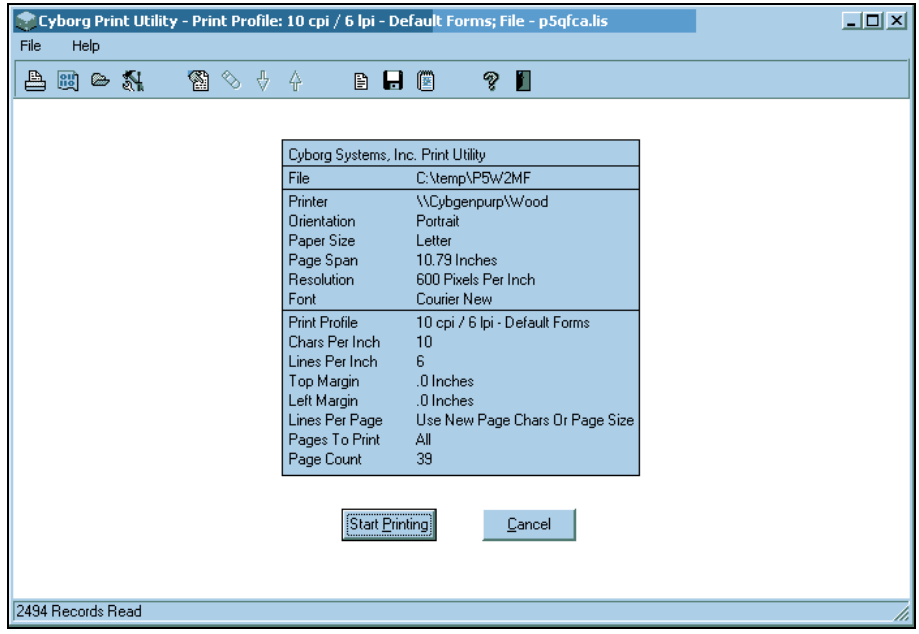
4. Select the report or form to print

Once you have selected the report or form to print, click 'Open'.

For practice, select a file and click 'Open'.

5. Click Start Printing to continue

An informational form is displayed that indicates in the lower left hand corner, the number of records that have been read as well as printer characteristics.

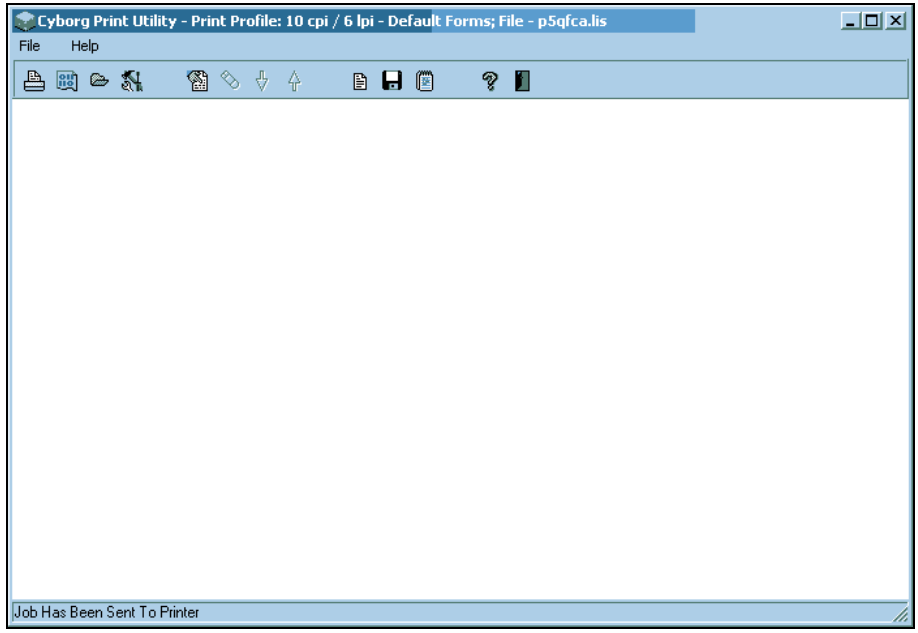


Note: *Make sure that your printer has been loaded with the correct form or report paper stock.*

On the Print Profile form that appears next, click Start **P**rinting to continue or **C**ancel to exit.

6. Receive confirmation

If you selected Start **P**rinting in Step 5, a message will appear at the bottom of the Print Profile form that indicates the report/form has been sent to the printer.



Using Print Preview

By using Print Preview, you can review the contents of a file prior to printing it.

1. Activate the Print Utility

Click on the desktop shortcut icon to start the Print Utility.

You can also execute the CYBPRUTL.EXE command:

- from a DOS prompt (once you have moved to the directory containing the .EXE file)
  or
- by double clicking on CYBPRUTL.EXE in the directory/file folder from within Windows Explorer.

For practice, start the Print Utility using the method you prefer.

2. Select the File option or the Print Preview icon

For practice, click on the File option.

3. Select the Print Preview option

The file that is displayed is the file you with which you are currently working.

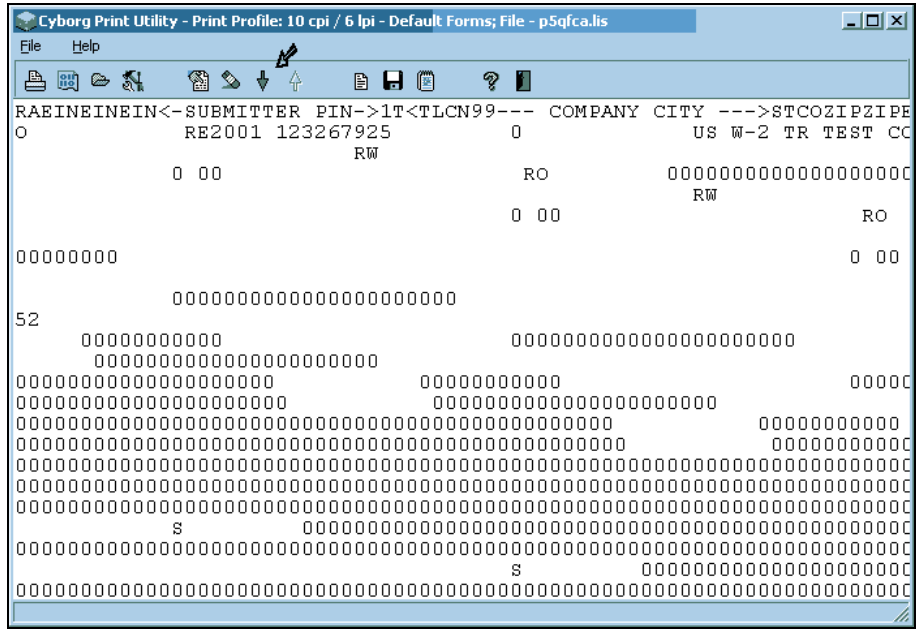
For practice, select Print Preview from the File menu options.

4. Scroll through the file

Notice that the down arrow icon on the Toolbar is active if the report is too long to be displayed all in one screen.

Use the down arrow to scroll through the file until the 'End of File has been reached' message is shown.

Use the up arrow (which also becomes active) to move to the beginning of the file.

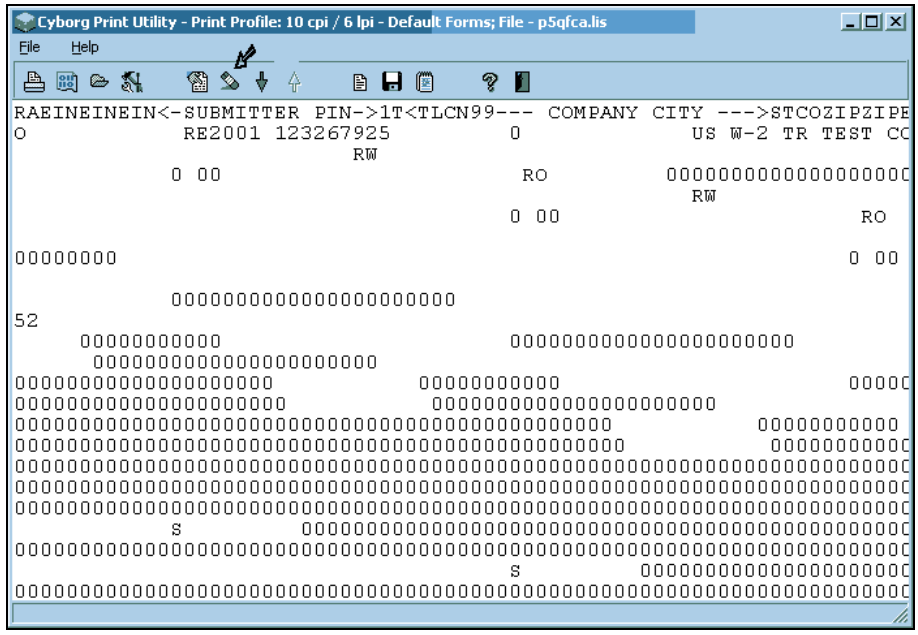


For practice, use the up and down arrows on the Toolbar to scroll through a report.

5. Clear the Print Preview

Notice that the eraser icon on the Toolbar is now active; it is no longer gray.

Click on the eraser icon to close the Print Preview.



For practice, click on the eraser icon to close the Print Preview.

Modifying a print profile

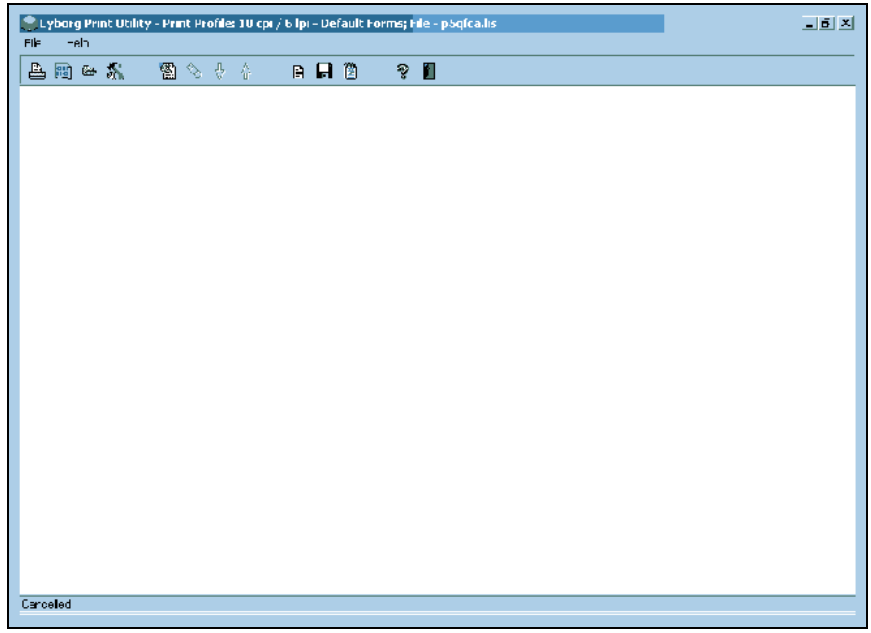
The Cyborg Print Utility comes with some default print profiles:

10cpi/6lpi	Default Forms
12cpi/8lpi	1099 R Laser Forms
12cpi/8lpi	80 Byte Text Files
12cpi/8lpi	W2 Laser Forms
13cpi/8lpi	Reports (Landscape)
17cpi/8lpi	Reports (Portrait)

It is possible to modify existing profiles to more precisely print forms and reports.

1. Click on the printer icon

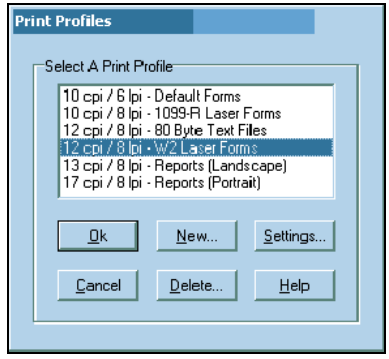
From the toolbar, click on the first icon, the printer.



2. Select a profile

From the Print Profiles menu that appears, select the profile that should be used to format the number of lines per inch (lpi) and characters per inch (cpi) for the report or form you want to print.

For practice, select '12cpi/8lpi - 1099-R Laser Forms'.



3. Adjust Settings, if required (Optional)

If you know that adjustments are necessary for proper print alignment, select the **S**ettings button.

*For practice, click on the **S**ettings button.*

4. Adjust margins, if required (Optional)

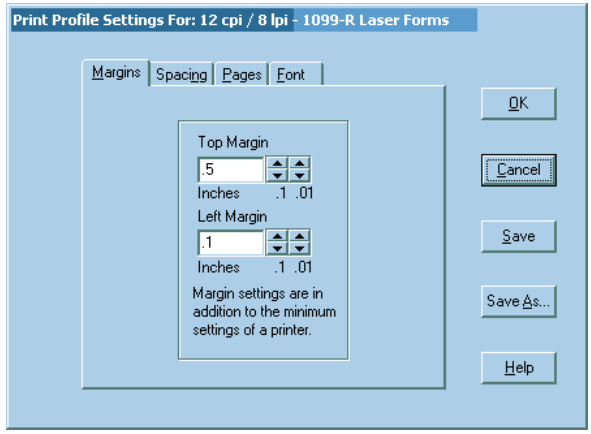
Note: Generally a laser printer has a resolution of 600 pixels to an inch. For example, increasing a top margin setting by 100 units moves the first print line down 1/6 of an inch.

Most frequently, margin adjustment is needed when using preprinted forms.

Generally it is the **M**argins area that will require adjustment.

Notice that you can make adjustments in tenths and hundredths of an inch.

For practice, increase the Top Margin to .5 units.



After you change a Setting, the **S**ave and Save **A**s buttons become active.

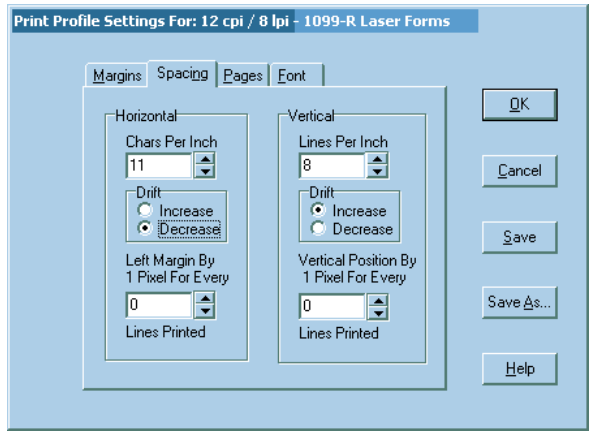
5. Adjust spacing, if required (Optional)

By clicking on the **S**pacing tab, you can adjust vertical and horizontal spacing.

Adjustments to the Line Height (in the Vertical Spacing column) are also possible, but you should rarely have to do so.

The effect of making adjustments to Line Height is cumulative. For example, an adjustment of one unit on a form of 114 such as the W2 Pressure Seal form will move the last line 114 units, or about 1/5 of an inch, up or down.

Notice also that you can increase characters per inch, lines per inch, drift, left margin and vertical pitch down to the number of pixels per line to give you greater control over form and report printing.



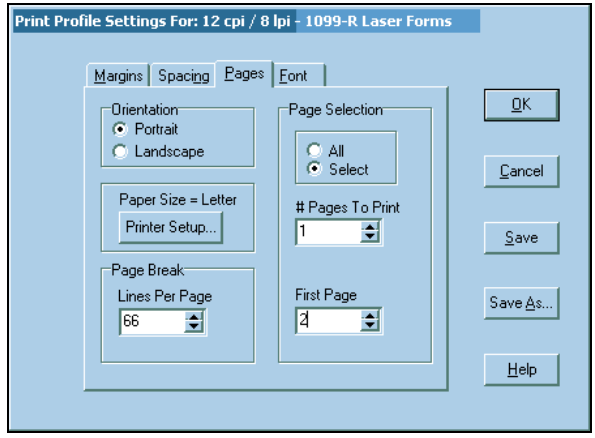
For practice, set the Horizontal Chars Per Inch to 11 and Decrease the Horizontal Drift.

6. Adjust pages, if required (Optional)

By clicking on the **P**ages tab you can select portrait or landscape mode printing, paper size, the number of lines per page, select all pages to print or specific pages to print, and the page by page number.

In the Page Selection column, indicating you want to print Select pages, causes the '# of Pages to Print' and the 'First Page' options to become active.

By using the Printer Setup button, you can select the printer to use and adjust other printer properties.

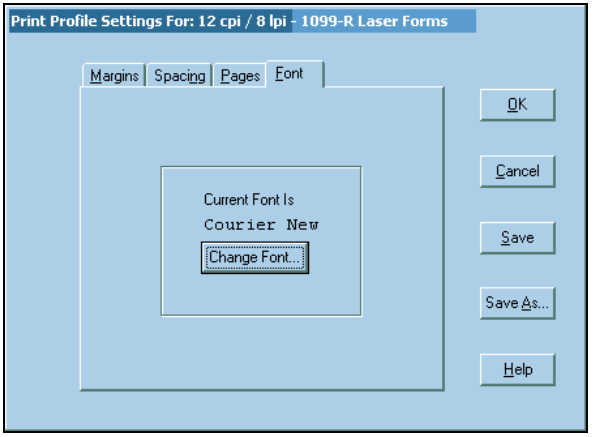


For practice, print 66 Lines per Page and select one page, page 2 as the First Page to print. Use the defaults Settings for Orientation and Paper Size.

7. Change the font, if necessary (Optional)

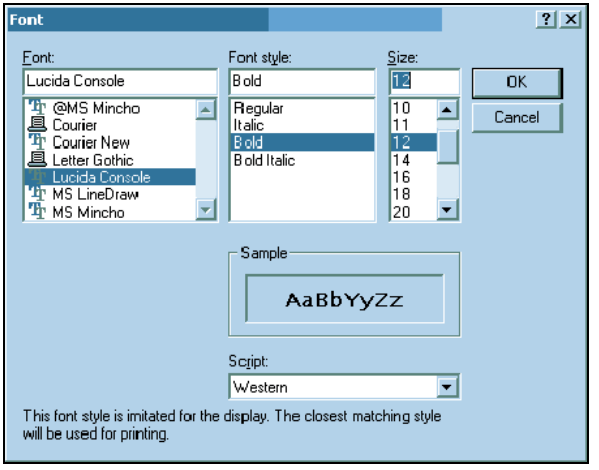
If you need to change the font used in printing, click the **F**ont tab.

The name of the font currently being used is displayed along with the option to Change Font.



A listing of available fonts, font style and font size is displayed by clicking the Change Font key.

Note: The listing of available fonts may be different from the following example as the content of your listing will reflect the fonts available on your computer.



After you click OK, the Font tab form will be re-displayed showing your font choice.

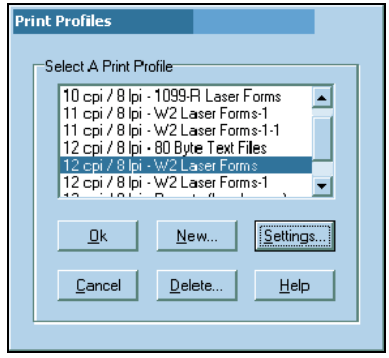
For practice, chose Lucinda Console or another available font on your computer, Bold, 12 and click OK.

8. Save the new Settings for the form/report

Once you have created the correct special Settings needed for a form, you can save them for re-use in the future under the original printer profile name by clicking **S**ave.

*For practice, click on **C**ancel as we do not want to save the changes.*

9. Click Cancel to exit the Print Profile



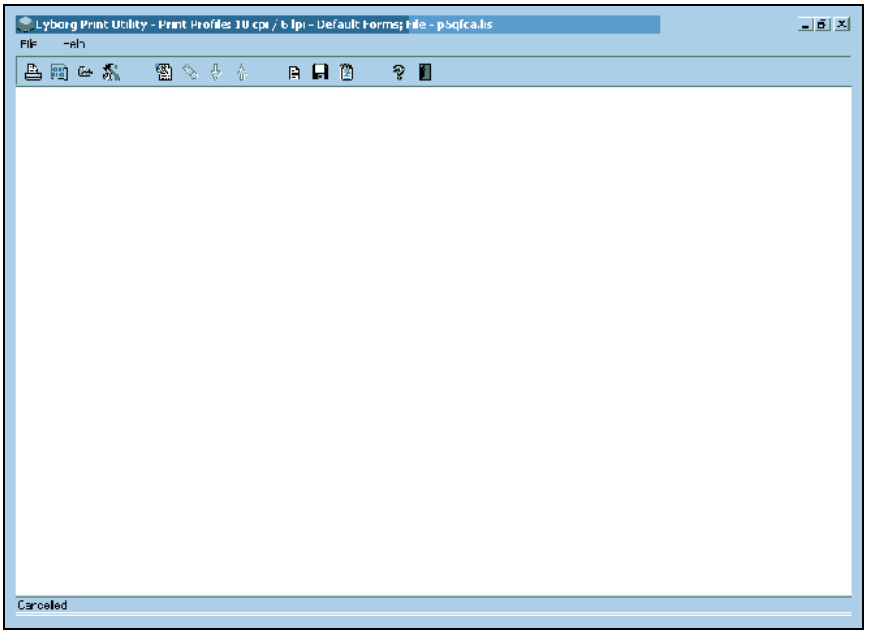
*For practice, click on **C**ancel.*

Creating a new print profile

In addition to modifying existing print profiles as in Printing Forms/Reports, it is possible to create and save new print profiles.

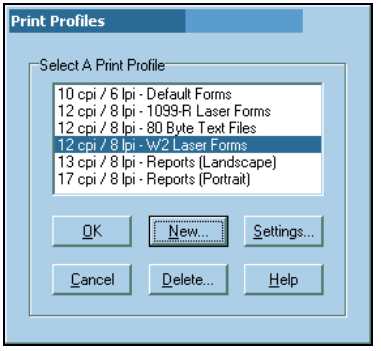
1. Select the printer icon or the File, Print Profiles option

From the toolbar, click on the first icon, the printer.



2. Select the New option button

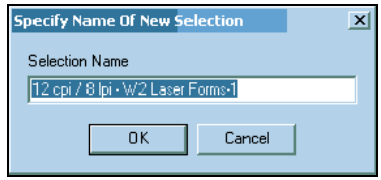
From the Print Profiles menu that appears, click the **N**ew option button.



For practice, click New.

3. Name the new print profile

Enter the name of the print profile that you are creating.



For practice, enter '12 cpi / 8 lpi - W2 Laser Forms-1'.

4. Click OK.

For practice, click OK.

5. Adjust Settings—Margins

The Print Profile Settings For: 12 cpi / 8 lpi - W2 Laser Forms-1 form appears after you click OK in Step 4.

Note: The Print Profile Settings that are displayed are those for the last form you selected. In this example, theW2 Laser Forms-1 form was lasted used. You may see another form depending on your last selection.

*For practice, click on the **M**argins tab.*

6. Adjust margins, if required (Optional)

Note: Generally a laser printer has a resolution of 600 pixels to an inch. For example, increasing a top margin setting by 100 units moves the first print line down 1/6 of an inch.

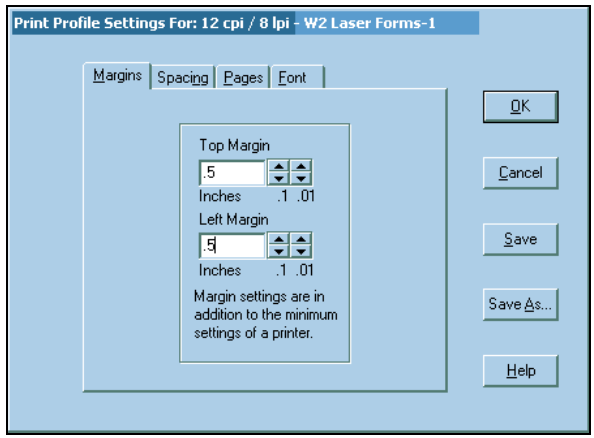
Most frequently, margin adjustment is needed when using preprinted forms.

Generally it is the **M**argins area that will require adjustment.

Notice that you can make adjustments in tenths and hundredths of an inch.

Adjustments to the Line Height (in the Vertical Spacing column) are also possible, but you should rarely have to do so. The effect of making adjustments to Line Height is cumulative. For example, an adjustment of one unit on a form of 114 such as the W2 Pressure Seal form will move the last line 114 units, or about 1/5 of an inch, up or down.

For practice, increase the Top Margin and the Left Margin each to .5 units.

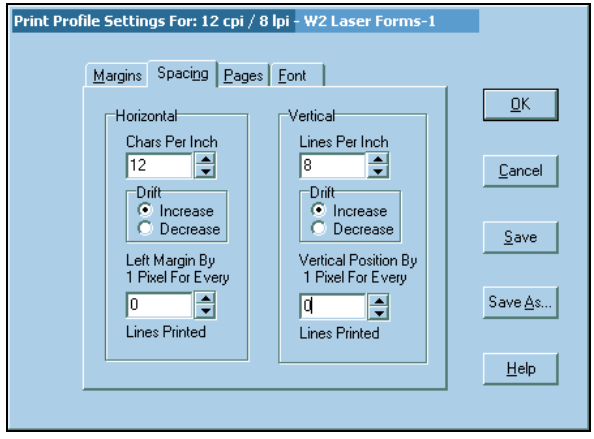


After you change a Setting, the **S**ave and Save **A**s buttons become active.

7. Adjust Settings—Spacing (Optional)

By clicking on the **S**pacing tab, you can adjust vertical and horizontal spacing.

Notice also that you can increase characters per inch, lines per inch, drift, left margin and vertical pitch down to the number of pixels per line to give you greater control over form and report printing.

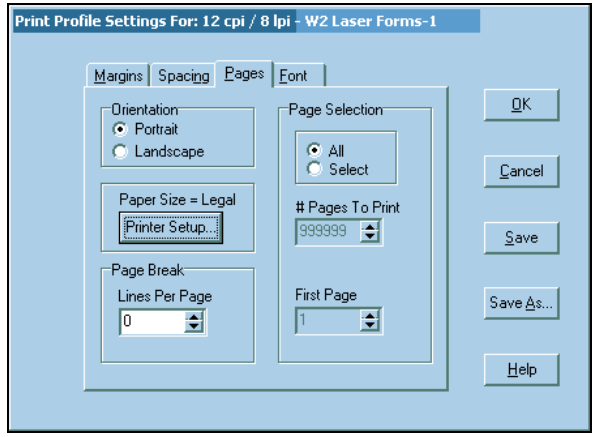


For practice, set the Horizontal Chars Per Inch to12 and Vertical Lines Per Inch to 8.

8. Adjust Settings—Pages (Optional)

By clicking on the **P**ages tab you can select portrait or landscape mode printing, paper size, the number of lines per page, select all pages to print or specific pages to print, and the page by page number.

In the Page Selection column, indicating you want to print Select pages, causes the '# of Pages to Print' and the 'First Page' options to become active.

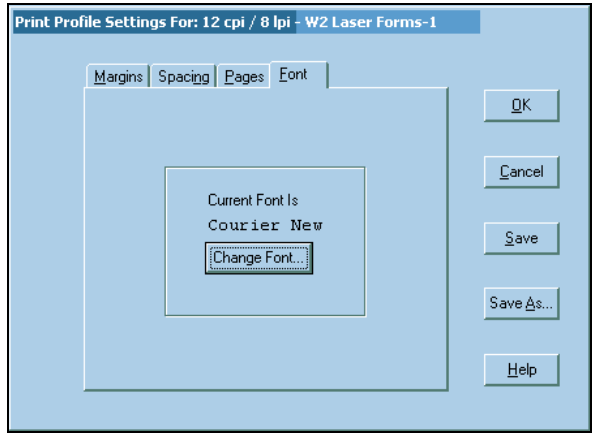


For practice, set the Orientation to Landscape and Page Selection to All. Set the Paper Size to Legal by selecting Printer Setup, then Paper Size to Legal..

9. Adjust Settings—Font (Optional)

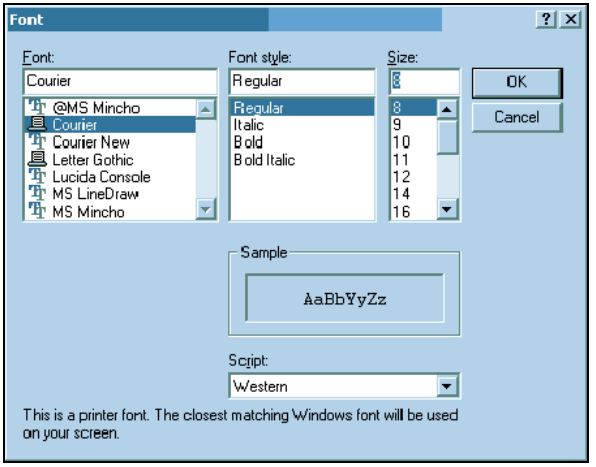
If you need to change the font used in printing, click the **F**ont tab.

A default font displays along with the option to Change Font.



A listing of available fonts, font style and font size is displayed by clicking the Change Font key.

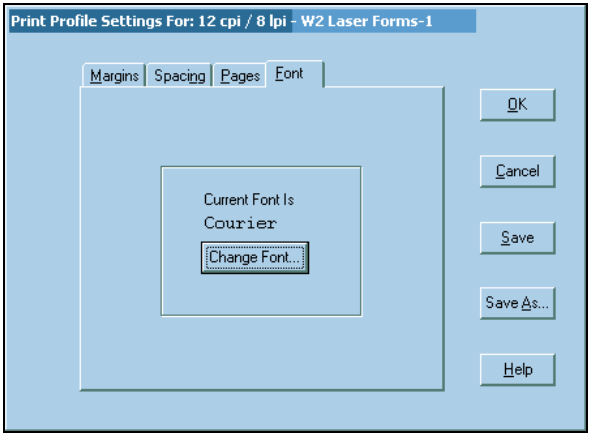
Note: *The listing of available fonts may be different from the following example as the content of your listing will reflect the fonts available on your computer.*



For practice, chose Courier, Regular, 8, and click OK.

10. Verify font selection

After you click OK, the **F**ont tab form will be re-displayed to confirm your choice of fonts.



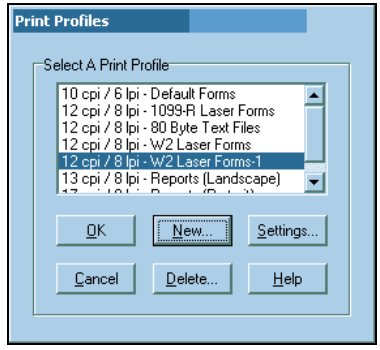
11. Save the new Settings for the form/report

Once you have created the correct special Settings needed for a form, you can save them for re-use in the future.

For practice, click on Save.

12. Verify the Print Profile listing

The name that you gave this print profile in Step 3 should now appear in the listing of Print Profiles.



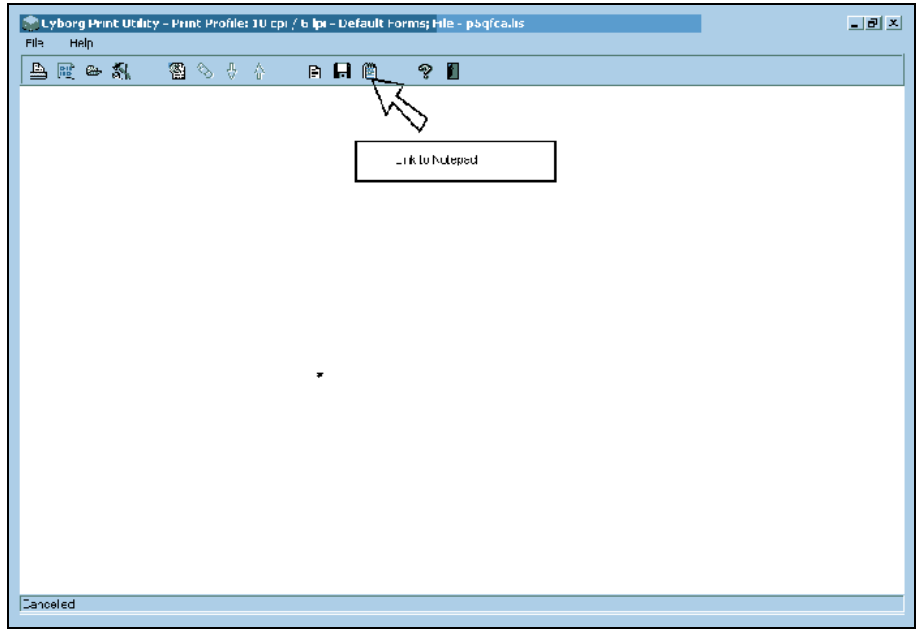
13. Click OK to exit the Print Profiles

For practice, click **O**K.

Linking to Notepad

While in the Cyborg Print Utility you can open, edit, and save a document using the link to Notepad.

1. Select the File option or click on the Notepad icon



For practice, click on the Notepad icon.

2. Open a file

Use the File option on the Notepad menu to open a file.

For practice, open a file of your choosing.

Note: You may have to browse to the appropriate directory to find the file you wish to open.

The various activities that can be performed in Notepad (reviewing, editing, printing, searching and so forth) are available to you.

3. Close the file

After reviewing the file you opened, exit Notepad to return to the Cyborg Print Utility.

For practice, select File then Exit from the Notepad menu.

Adding carriage returns/line feeds to tape

*Note: If the **tape** file was created on an IBM EBCDIC platform, you do not need to use this utility to view the tape file.*

To view the contents of magnetic media using an editor, the Print Utility can insert carriage returns/line feeds. If you were to try to view the contents without the carriage returns, the file would appear as one long record.

1. Activate the Print Utility

Click on the desktop shortcut icon to start the Print Utility.

You can also execute the CYBPRUTL.EXE command:

- from a DOS prompt (once you have moved to the directory containing the .EXE file) or
- by double clicking on CYBPRUTL.EXE in the directory/file folder from within Windows Explorer.

For practice, execute the Print Utility.

2. Select the File option or the Add Carriage Control icon

For practice, click on File.

3. Select the Add CR/LF to Tape option

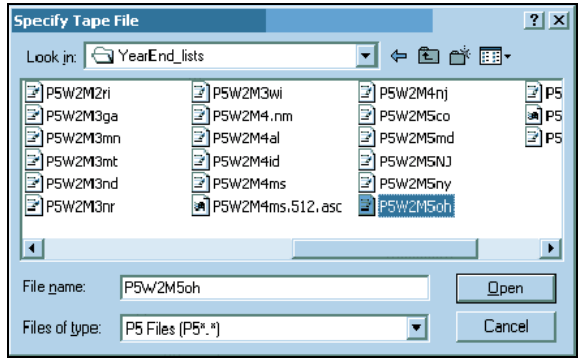
For practice, click on Add CR/LF to Tape.

4. Choose the tape file to which to add CR/LF

In order to view the output with carriage returns/line feeds (CR/LF) inserted, you must first select the file that you want to view.

For practice, select a file and click Open.

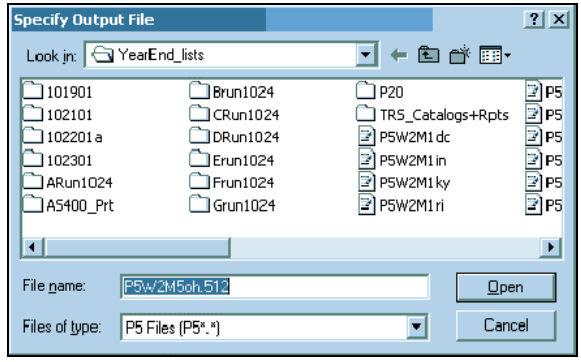
Note: It may be necessary to browse to the directory in which your files are located.



5. Name the output file

The file into which the CR/LF are inserted can be saved under a variation of its original name or a name that is meaningful to you.

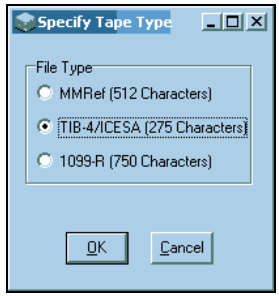
For practice, accept the name suggested by the Print Utility program and click Open.



6. Indicate the filing format

On the form that is displayed next, you must specify the format used when the tape was created.

For practice, choose TIB-4/ICESA and then click OK.



7. View the file with CR/LF inserted

After you click OK, NotePad will open automatically to display the file with Carriage Returns/Line Feeds (CR/LF) inserted.

A message will appear in the lower left corner of the Print Utility confirming that 'X' number of records were written to the directory in which the original output file was located.

Note that the file with CR/LFs inserted has a file name extension of '.ASC'.

Note: It is recommended that after printing these forms or reports, you delete the '.ASC' files in order to conserve space on the computer.

8. Close the file

Using the 'X' in the upper right-hand corner of Notepad or the File, Exit commands on the menu, close the file.

For practice, click 'X' in the upper right-hand corner of the form.

9. Close the Print Utility

To close the Print Utility, use the 'X' in the upper right-hand corner of the Cyborg Print Utility or the File, Exit commands on the menu.

For practice, click 'X' in the upper right-hand corner of the form

Copying tape to diskette(s)

Note: This utility will span diskettes if the amount of data contained on the tape will not fit on one diskette. Be sure to label diskettes sequentially as, for example, 1 of 5, 2 of 5, 3 of 5, and so forth.

1. Activate the Print Utility

Click on the desktop shortcut icon to start the Print Utility.

You can also execute the CYBPRUTL.EXE command:

- from a DOS prompt (once you have moved to the directory containing the .EXE file) or
- by double clicking on CYBPRUTL.EXE in the directory/file folder from within Windows Explorer.

For practice, execute the Print Utility.

2. Select the File option or the diskette icon

Note: If you select the diskette icon, go to Step 4.

For practice, click on File.

3. Select Copy Tape to Diskette

Click on Copy Tape to Diskette.

4. Open the tape file

Select the name of the tape file you which to copy to diskette and click Open.

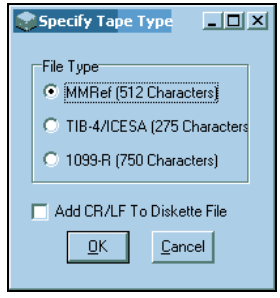
Note: You may have to browse to the appropriate directory to find the file you wish to open.

For practice, select a tape file name of your choosing to convert and then click Open.

5. Specify the tape type

You must indicate the format used when the tape was created.

Note: When creating the diskette, you may, depending on your reporting requirements, have to insert carriage returns/line feeds (CR/LF). If so, click the 'Add CR/LF to Diskette File' option.



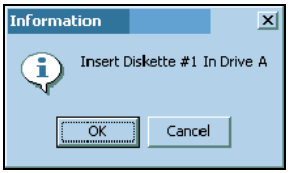
*For practice, select MMREF and **O**K.*

6. Insert diskette into computer

Note: You should use new, formatted empty diskettes.

After you click **O**K in Step 5, you will be instructed to insert the first diskette into the floppy disk drive on your computer.

Click OK to continue.

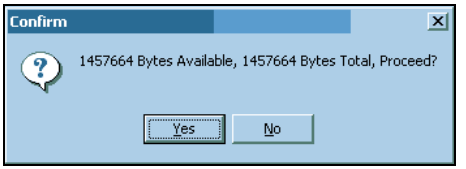


For practice, insert a diskette and click OK.

7. Confirm copy

After you click OK in Step 6, you will be asked to confirm that you want to proceed.

Click **Y**es to continue or **N**o to end the process.



*For practice, click **Y**es.*

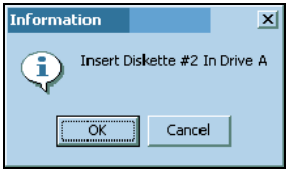
Note: As the copying occurs there will be a count of the number of records copied shown at the bottom of the form.

8. Insert additional diskettes, if required.

If the copy spans multiple diskettes, you will be asked periodically to insert diskettes into the computer.

Click OK after inserting the next diskette.

Note: Remember to sequentially number the diskettes on the diskette label as you remove them.

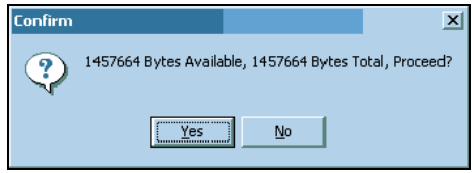


For practice, if the tape file you selected to copy is spanning multiple diskettes, insert the next diskette. Click OK to continue.

9. Confirm copy, if spanning diskettes

After you click OK in Step 8, you will be asked to confirm that you want to proceed.

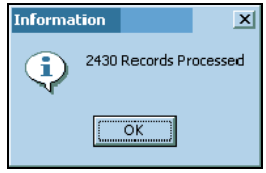
Click **Y**es to continue or **N**o to end the process.



*For practice, click **Y**es to continue.*

10. End process

After the last record is copied, you will receive information giving the number of records copied from tape to diskette.



Click OK to close the Information form ending the copy process.

Remove the last diskette from the drive and label it sequentially as 'X of Y'

where 'X' is the number of this diskette in the total number of ('Y') diskettes used.

For practice, click OK..

Review of Questions Answered

1. What is the Cyborg Print Utility?

2. On which computers can I use the utility?

3. How can I review magnetic media using the Cyborg Print Utility?

PART 3

Appendix

In This Section

APPENDIX A

Practice and Review Answers

In This Appendix

Introduction

This appendix provides answers for the Review of Questions Answered questions that are included in the instructional material.

Practice and Review Answers

Answers for Review Questions - Using the Print Utility

1. What is the Cyborg Print Utility?
   The Cyborg Print Utility is meant to facilitate the printing of year-end forms (W2s and 1099s, for example) and year-end and quarterly reports, although you may find it useful when printing various other reports such as the output from payruns, maintenance runs or CBSV report runs.
2. On which computers can I use the utility?
   The utility will run on any Microsoft Windows platform (Windows 95 or higher).
3. How can I review magnetic media using the Cyborg Print Utility?
   Choose the Print Utility menu option (under the File command) that inserts carriage returns/line feeds into the output file. After choosing the file you want to review, save it under a different name so the source can be preserved for printing later. Then select the filing format that the system will use in formatting the records for your viewing. The system will open the file with CR/LF inserted using Notepad.

Glossary of Terms

.EXE
A binary file containing a program in machine language that is ready to be executed.

.INI
A file that contains the parameters (values) used by the .exe file (program).

ASCII
American **S**tandard **C**ode for **I**nformation **I**nterchange. The basis of character sets used in almost all present-day computers; US-ASCII uses only seven bits to convey some control codes, space, numbers, most basic punctuation, and unaccented letters a-z and A-Z.

CPI
Characters **p**er **i**nch

EBCDIC
Extended **B**inary **C**oded **D**ecimal **I**nterchange **C**ode; binary code for alphabetic and numeric characters developed by IBM for its computers.

FTP
File **T**ransfer **P**rotocol. A means of allowing a user on one computer to transfer files to and from another computer over a network

LPI
Lines **p**er **i**nch

PCL
Printer **C**ontrol **L**anguage

Pixel
The smallest rectangular area of an image on a screen.

Process
An action that brings about a result.

Transfer
To move data or files from one computer to another.

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